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[ESTABLISHED 1848.]



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# AMERICAN FARMER RURAL REGISTER.

"O FORTUNATOS NIMIUM SUA SI BONA NORINT "AGRICOLAS."

PUBLISHED BY SAML. SANDS & SON, BALTIMORE, MD.

Vol. I .- No. 12.]

DECEMBER, 1872.

NEW SERIES.

### JAMES GOWEN, The Farmer of Mount Airy.

This name will be recognized by our more recent readers as that of the author of several able papers in the current volume of this journal, whilst our older friends will recall the fame of one who for many years occupied a prominent position in American agriculture, and whose contributions to its literature, and the accounts of whose successes frequently appeared in the former series of our American Flarmer. What Mr. Alderman Mechi has been to British agriculture, Mr. Gowen was to that of the United States, and for many years Mount Airy was the Tiptree Hall of this country.

Visiting in October the Horticultural Exhibition at Philadelphia, we were very glad to have the opportunity of paying our respects to this gentleman, so well known to the communities into which the Farmer goes, and as he has always been most actively interested in the improvement of the agriculture of the South, we conceive that some account of him and of his handsome estate, will prove very interesting to his numerous friends throughout the country.

We found Mr. Gowen at home, his princely mansion at Mount Airy (now one of the suburbs of Philadelphia) being on the main road or street of the place, but so situated that the fine evergreen and deciduous trees, planted many years ago by him, give it the effect of remoteness from any other dwellings, though in fact on farms and villa lots

immediately contiguous, resides a large family of descendants of the eminent agriculturist, his sons and sons-in-law, all gentlemen of the highest positions in business and social circles, sojourning, for the summer at least, around the paternal nest. The only one of the sons whom we had the pleasure of meeting, was Franklin B. Gowen, Esq., the distinguished President of the Philadelphia and Reading Railroad, one of the wealthiest and most powerful corporations of the great Commonwealth of Pennsylvania.

Mr. Gowen is very venerable in appearance, though extremely active both in body and mind, his 84 years having dealt very gently with him so far as the real man within is concerned. From the evidences around him in his study, it was patent that he is still, for his age, considerable of an in-door worker, and without, all the operations of his farm and the careful breeding of his herd of Short Horns are conducted by him with undiminished interest and energy. Confined much to the house during inclement seasons, and by the ailments which are the usual concomitants of age, we could scarcely have reasonably exexpected to find the place in the best of order, and it is but frankness to say that we were astonished at the appearance of the barns and fields, the root cellars and granaries, the stables and the manure piles. Lacking so frequently the watchful eye of the master. (who employs no manager or overseer,) we were unprepared to see everything in holiday condition, and our surprise was as undisguised as our pleasure was great, in noting everywhere such evidences of thrift, energy, order and true husbandlike economy. In the barns everything was as neat as though recently swept by a housewife's broom; the stables were all littered with clean straw; in the yards no manure was to be seen exposed to hot suns and washing rains, all being carefully piled up, with a basin-like hollow, such as the Farmer so often recommends, properly situated to receive the liquid manure, which is periodically removed in suitable carts to the fields, where it is applied as a top-dressing to the grass. The root cellars surpass in size and convenient arrangement anything we have ever seen in this country, their capacity being thousands of bushels. Although the crops of '72 were not all harvested, we saw in these cellars over 1,000 bushels of potatoes; at least 1,000 bushels of sugar beets, the product of an 11 acres of land; whilst still in the field there was a crop of Norfolk turnips which it was estimated would reach 1,000 bushels to the acre-a yield closely approximating that of the best of English farms. and generally thought to be unattainable in our climate. In the granaries we found not only an abundance of corn of last year's crop, but also a considerable surplus of that of the preceding year, whilst in the corn-fields the shocks were of such number and size as to resemble the tents of a vast encamping army. The sod on the grass and clover fields was so dense that it reminded us of the unbroken prairie lands where vegetation has been accumulating for long series of years and years. All this too on an upland farm, the soil of which is naturally thin, with, only two or three feet below, an almost continuous quarry of unbroken rock. The secret of these crops, of this high fertility of a naturally poor soil, is to be found entirely, we suppose, in manure and manure, and, we might add-brains.

Mr. Gowen makes no composts, and save with the straw from the stables, the manure goes unmixed to the fields. Nor does he use any artificial or purchased fertilizers whatever, if we except, perhaps, moderate quantities of plaster. Yet upon this farm of 120 acres under cultivation, he keeps at all times from 30 to 40 head of cattle, young and old, five horses and numerous swine, besides yearly selling large quantities of hay, as well as of potatoes and grain. It is worthy of remark that the farm is cultivated and these crops raised by the use only of the old-fashioned imple-

ments of husbandry—the most recent patterns of plows on the place being some presented to Mr. Gowen in 1844, and the harrows being the antique square ones, now so largely superseded.

Mr. Gowen has long been a breeder of Short Horn cattle, a race for which he still has the highest admiration, and compared to which, the (comparatively) new-fashioned Alderneys, now so popular, are contemptuously regarded by him. He has generally inclined his breeding, we believe, to families noted for milk rather than for aptitude to fatten, and in his herd have been found some of the finest animals of this breed on record, to one or more of which we will allude below. For many years most of the farmers of Maryland and Virginia who bred Short-Horns, resorted to Mount Airy for the means of improving their own herdsamongst those of the former State we instance the late lamented Charles B. Calvert and Gen. Horace Capron, ex-Commissioner of the United States Department of Agriculture. In addition to the large number of cattle disposed of at private sale, Mr. G. has had ten public sales at which, in the aggregate, over 600 head have been sold.

Having incidentally heard, from correspondents in the States so seriously injured by the war, of instances of the generosity of Mr. G., we took the liberty of asking him concerning his comparatively recent shipments of improved stock to the South, and we think we can properly state, without a violation of decorum, that he informed us, that since the war he has sent as presents to his old friends—mainly in Virginia—over sixty head of Short Horns, besides many of his improved Swine—a practical and emphatic illustration of the unabated interest our revered friend still feels in the farmers and the agriculture of the Old Dominion.

In this herd the cattle receive, year in and out, no grain, and yet they are always in the best of condition and ready at any time for the shambles. Of course in winter they are abundantly provided with roots, a provision considered not only essential to their health, but also conducive, in fattening animals, to that fine flavor for which the excellent beef and mutton of England were formerly so famous, and which was due in a great measure to the feeding of turnips. In the summer a system of partial soiling is practiced, of which,

however, the readers of the present volume of the Farmer already know something from Mr. Gowen's own pen. By soiling, as practiced by him, stall feeding is not meant to be understood, all his cattle receiving an amount of exercise sufficient for their comfort and health. By means of clover sowed corn, lucerne, &c., he is enabled from the produce of two acres to keep as much stock, and to keep it in as good health and condition as twenty acres of pasturage would do, and Mr. Gowen bade us say to his friends and ours, that by the aid of shelter and shade, artificially provided if necessary, with corn, clover and lucerne, he is satisfied he could safely engage not only to keep Short Horns in good health and vigor, but to make in South Carolina or Alabama, butter, not much, if any, inferior to that "gilt-edged" article for which the Quaker City is famous the country over; but that this can be accomplished only by persistent and incessant care, very different, perhaps, from the treatment good cattle often receive after their arrival at the South, where, unaccustomed to the ardor of the sun and furnished neither by nature or art with necessary shelter, and water, they naturally suffer and perish.

Mr. G. can hope, he says, to have but one more public sale of cattle from his herd, but we hope his life may be so long spared that one more will not complete the series. It deserves notice in passing that he has, in his career as a breeder, never entered an animal in a herd-book. Carefully scrutinizing the pedigrees of the animals he imported, all of which were entered in the British Herd Book, edited by Coates, he afterwards kept a record for himself, and in selling his stock, referred only to it, considering, as he said to us, his own honor and word as a superior guarantee to that which the entry in any American Herd Book could give-a thrust at Americans (Mr. Gowen is by birth an Irishman-and proud of it!) hardly, we think, deserved.

Of swine Mr. G. has had for many years a variety, which he designates as the White Berkshire. They are not as complete in the ear, but are larger than the black. He regards them as the best animals, the best larders and the best feeders, of any swine he has ever kept. A dozen of them can be kept on what would not support nine of any other breed. It is said that the Chester county swine owe their manifest improvement in latter years to their breeders having gotten hold of this va-

riety, which, however, seems lately to be lost in England. It is worthy of mention that these swine are identical in shape with the black Berkshire, and that occasionally in a litter of pigs there will be one or more perfectly black ones. The meat is very superior, the hams, as we know by a thorough test, being very sweet and fine, equalling the best Westphalia, though perhaps some of their merit is due to the curing.

During the whole of our visit at Mount Airy a most uncomfortable drizzling rain fell, but escorted by John Hamilton, one of the hands twenty-five years on the place, we managed to get a tolerable look at the herd. Of the bulls, Conservator is a handsome roan, three years old, very fine about the crops and quarters, and a mellow handler. Hawthorne, white, is two years, and Monmouth is a promising roan yearling. Among the older cows, we noted particularly, Kate Kearney, a rich red; Creamcup, white; Milly, white with red neck-a large fine cow; Althea, white and roan, a model in shape, though rather undersized compared with the others, and Buttercup, red and white. Of the heifers, Flora, a neat white; Sallie, a very handsome and square roan; Bessie, a well-shaped red and white, and Tidy, a neat roan, very appropriately named, struck us as specially noteworthy.

Our friend, Colonel Willis, of Orange, Va., bought, not long since, several fine animals from this herd, amongst them, Mountain Duke, a very superior bull, as likewise was Albion, who, with Troubadour and Raspberry, went to Colonel Dulaney, of Fauquier, Va. In this State there are some good representatives of the Mount Airy herd. We saw, last summer, a fine white bull from it at Colonel John R. Emory's, of Queen Anne's, and the herd belonging to Mount St. Mary's College, exhibited last year at Pimlico, and at several of our county shows this year, is largely from Mr. Gowen's stock.

As an example of a well kept farm Mount Airy stands very prominent. A large portion of the estate is surrounded by a substantial stone fence, not built dry, but laid in mortar. The headlands and fence corners, and even the walks in the garden are all mown for the cattle—a practice necessarily tending to neatness in appearance.

Over forty years ago Mr. Gowen retired from business as a merchant, and began at Mount Airy that system of culture and hus-

bandry which awakened so much surprise and compelled so much admiration. sessed, as we believe, of a large fortune, he took a pride and pleasure in making his farm not only maintain itself, but also support in comfort and case a large family, and it was long his boast, that, by the half-bushel and the steelyard, his farm produced more, at a less cost, than any other in the United States-not that he made more money, since others might, and most probably did, save where he spent, but that on the same area he grew more tons of hay and more bushels of corn, wheat and potatoes than anyone else. As was the case with Mr. Mechi, to whom we have compared Mr. Gowen, people were skeptical; they argued and found objections. Some knew he could not make the farm pay for the amount of labor employed, (this was a strong point also against Mr. M.) and some knew something else would prevent his doing what he contended he could do, and had done, and all joined in a similar cry to that made on Mr. Mechi for an exhibition of his balance sheet, until, like Mr. M., Mr. Gowen showed his balance sheet and confounded his opposers! There was nothing hypothetical-nothing taken for granted-but of the products of his farm-as with the products of certain remarkable cows which he had-he had provided the most lucid and connected evidence-every link in the chain being so complete that the testimony would have been unreservedly accepted in any court of justice.

Having shown by his practice what could be accomplished, and so proved himself a competent adviser of others, Mr. Gowen turned his attention to the great questions of agricultural education and agricultural improvement, and by his pen in communications to the American Former and other agricultural journals, and by public addresses, stirred up the minds of the agricultural public to the necessity of progress in their art, and to the duty of providing suitable institutions for the instruction of coming generations of farmers. For many years his interest was much engaged in matters connected with agriculture in the South, and in various ways he offered recommendations, timely and valuable, for the consideration of the farmers of that section. He was, we believe, the first to propose the formation of a State Agrl. Society by the farmers of Virginia, and in many ways he contributed to its establishment and success.

He lent his aid to many other societies, and his services were constantly sought to deliver addresses or to serve on the most important awarding committees. He was one of the first to ardently espouse the project of establishing agricultural colleges, and wrote and spoke much in favor of them. At one time, indeed, he resolved upon founding one by his own act at Mount Airy, the main support of which he intended to charge upon his own revenue, but circumstances seemed unpropitious, and his liberal scheme was with regret abandoned.

Since the commencement of the late war Mr. Gowen has lived very retired. The sad reverses of fortune which it caused so many of his old friends, have touched him very much, and his advanced age forbids his actively participating, as he could wish, in the great work of reviving and reinvigorating the agriculture of the South under its changed conditions, although to his numerous correspondents in that section he is prompt in expressing his views upon the questions which, from his experience and sound judgment, are continually presented to him for his consideration. He is very far, therefore, from having outlived his usefulness, and his clear head and facile pen are both ready, as our readers know, to illumine dark paths, or to commend the right ones, in the progress of agriculture. That a life so useful and so honorable may be much longer continued, is a hope in which, we are sure, we will be joined by every reader of these pages!

MR. GOWEN'S SHORT-HORN COW DAIRY MAID.

From an old volume of the American Farmer we condense an account of this celebrated cow, which will be found interesting in connection with the above article.

"Dairy Maid, roan, was calved 1835, by Harlsey, 2001; (Harlsey's dam by Pilot, 496.) by Rob Roy, 557; Rob Roy by Remus, a son of Comet, 155; (tam Lady Jane by Comet, 155, (the 1000 guinea bull;) gr. dam Cleasley Lady, by a son of Favorite, 252; g. gd. Lucinda, by Mr. Hutton's Bull of Marske; g. g. dam Lucy, by Barningham, 56. She was bred by Mr. J. Whitaker, of Burley, Yorkshire, England, and was imported by Mr. Gowen in 1838. As a milker she is believed to have been unrivalled, and she is described as having exhibited "in points, figure and proportions the very acme of the improved Short Horn Durhams," whilst she was derived from the purest and best blood of Great Britain, being grand daughter through Lady Jane to Comet, and gr. grand daughter on

the sire's side through Remus, son of Comet. In the Summer of 1839, in the fourth month from calving, after suckling her calf Leander three months, she yielded in one week 225½ quarts of strained milk, being an average of over 32 quarts a day, and the next summer, 1840, in the fourth month, after suckling her calf, Allan a Dale, three months, she yielded in one week 235½ quarts, being more than 33½ quarts daily. "These tests were made in the most scrupulous and exact manner to provide against mistake or error as to time or quantity."

Upon the wall of Mr. Gowen's library there hangs an oil painting, beautiful as a work of art, and said to be exceedingly faithful in the portraitures, of Dairy Maid and her two sons, Leander and Allen a Dale, executed by Mr. Woodside, who is said to have been one of the best painters of animals this country has yet produced. The original sketch of the famous cow, made in the field by Mr. Woodside, was presented by Mr. Gowen to one of the editors of the Farmer, and now adorns our office.

### PRODUCTS OF MR. GOWEN'S FARM

As far back as 1844 Mr. G. made the following report of the manner in which his farming operations were conducted, and of the hay and root crops raised upon it:

The secret of keeping so large a stock on so little land, consists in my practice of partial soiling, and green crops, whereby I make some four to five acres do the work of thirty acres, in the "slow and easy go way." May to August, my cattle are confined to one or two fields, most commonly one, to which they are driven, more for exercise in the cooler parts of the day than for pasture, they being fed in the stables, early in the morning, at noon, and at night, with food cut for them from a lot adjoining the barnyard. This food is generally of lucerne, orchard grass and clover, oats and corn. The patches from which the corn and oats are cut, are always sowed with turnips in August. No one can credit, unless he has had proper experience in the matter, the quantity of food that one acre of lucerne, one of rich orchard grass and clover, and one of oats and corn, afford from May till August, nor can he estimate the great saving in manure, much less the comparatively good health of the cattle, from not being exposed on naked fields, under a fervid sun, toil-ing all day in search of food. This practice allows me to crop almost the whole of the land, and to make some 120 to 150 tons of hav annually. In the fall, from August till November, the cattle have the whole range of the mowed lands, as I do not cut second crop grass for hay. Then for winter feed, I have always an acre of sugar beets; half an acre of sugar parsnips; half an acre or more of carrots, for my horses; and generally three to

four acres of turnips. I report to the Committee on Crops this season, over 100 tons of these roots. In 1843, I gathered from one acre, 1078 bushels sugar beets, 60 lbs. to the bushel; carrots at the rate of 687 bushels; sugar parsnips, 868 bushels. This year 672 bushels sugar beets; 970 bushels carrots; 700 bushels sugar parsnips; and from three and a half acres, 2500 bushels of turnips, sowed with timothy seed.

### On the Cultivation of Cotton.

We have recently drawn attention to the work of M. Geo. Ville, a French author of high repute, who has been for many years investigating the subject of Plant Food, and has come to the conclusion that the whole question of manuring may be summed up in the application of some four chemical substances, viz: phosphate of lime, potassa, nitrogen, and lime, all of which are found in farm yard manures, compost, &c., but in too small an amount to meet the necessities of the farmer. A very intelligent planter of Georgia, Dr. E. M. Pendleton, has been testing the question on his own crop, and in a very able communication in the "Plantation," comes to the conclusion that M. Ville "makes a great mistake of having a complete manure for every soil, when these four elements, applied to a cotton field exhausted of humus or vegetable matter, so far from remunerating the planter for his outlay, would cause premature exhaustion and an early blight of the plant." M. Ville, as his reviewer indicates, could not have contemplated the application of his "perfect manure" to a soil destitute of humus or vegetable mould, "in the cultivated soil of France, with proper rotation of crops, there being rarely any exhaustion of this principle." Knowing Dr. Pendleton as an able chemist as well as a zealous planter, to whom in former times we have shipped large quantities of manures. particularly of Peruvian guano, we avail of the opportunity presented in the communication alluded to, to transfer to our pages the result of his experience in raising cotton. Before doing so, however, we will recapitulate his arguments and give the result of his exper-

He purchased last Spring material enough of the "complete manure" for four rows of cotton 35 yards long, and applied it broadcast, as recommended by M. Ville, giving it the advantage of the cotton seed being rubbed in a good soluble guano, which gave the plants

a start. On either side he applied a simple nitro-phosphate, (super phosphate with ammonia,) at the rate of 200 lbs., and costing six dollars and fifty cents, per acre. The "complete manure" was applied at the rate of 1324 lbs., as recommended by M. Ville, and cost \$80 per acre, by the wholesale. But one picking had been made, with the following re-

	No manure.	Complete manure.	Nitro Phosphate.
1st row,	39 oz.	45 oz.	82 oz.
2d "	31 "	43 "	82 "
3d "	36 "	48 4	79 "
4th "	30 "	43 "	96 "
	136 oz.	179 oz.	339 oz.

A fifth row, with 100 lbs. of the nitrophosphate, produced 61 oz., at a cost of only \$3\frac{1}{2} per acre. If the question is asked, "will not this complete manure produce much better results the second, third and fourth years," which Dr. P. thinks is very doubtful, but if it does, he adds, "can we afford to pay \$80 an acre and wait for the slow process of Nature to render soluble these chemical salts? Certainly not."

We now come to the practice recommended by Dr. Pendleton, which is our main object, and with much pleasure we present it to our readers :-

We write (says he) in the interest of cotton planters, (no other class)-men who find themselves with plenty of poor land without laborers, and who desire to know how to make mule-feed in order to grow cotton, cultivate their fields annually and remuneratively,

and yet gradually improve their lands.

Admitting our postulate, that humus is the first principle exhausted from a worn-out soil, and next to it nitrogen and then phosphoric acid, how are these to be restored, so as to make the soil as productive as ever? Without recommending any regular rotation of crops, my plan is as follows:

Plant cotton in fresh lands, as long as there is sufficient vegetable matter in the soil to produce good, healthy plants without rust, applying from one to two hundred pounds of a good, soluble nitro-phosphate-with a view, not so much to improve the land, as to make a remunerative crop. This application will increase the crop from seventy-five to one hundred per cent. on production every year, and from one to five hundred per cent. on investment, according to the season, cultivation and the price of cotton, and leave in the soil considerable phosphoric acid for the next

Wherever the land is evidently measurably exhausted of the vegetable matter-which is known by rust in the cotton, small weed, early maturity of fruit, great susceptibility to

drouth, &c .- it must be changed from cotton to some humus-producing crop. The most profitable to the planter is the oat crop, because, while it makes more humus, it gives him more mule-feed for the labor than any other plant. Corn and wheat may, however, be used with good results in lands not too much exhausted. But a small grain crop is essential every few years, as corn is itself, to some extent, a humus-destroying plant.

We sow oats, then, first, to make muscle to produce cotton; and second, to grow humus, as a food for the cotton itself. In order to do this, instead of applying your cotton seed to corn after it has been heated and half of the nitrogen lost, put it on with your oats, sowing from October to January, as occasion serves, plowing in the oats and cotton seed together with a turning shovel, so as to protect the roots as much as possible from freezes. Apply from twenty to fifty bushels of cotton seed, according to their abundance, per acre, and the nitrogen in the seed will not only make a good crop and leave a heavy stubble. but cause a luxuriant crop of grass and weeds to spring up, which, turned in, if possible, before it goes to seed, will give you in the soil for the next-cotton crop not only a fine supply of humus, but more nitrogen than you could haul out during the Winter, if you had nothing else to do, and an inexhaustible supply of stable manure at your command.

You now prepare and plant this stubble in cotton the succeeding year, with the usual quantity of a good nitro-phosphate, in order to supply the manifest deficiency of nitrogen and phosphoric acid in every worn soil; not that these elements have been exhausted from our soils as yet, but existing, as they do, to some extent, in unassimilable and insoluble proportions, they must be replenished by enough prepared by science to supply the de-

ficiency

A soil well supplied with humus by this rotation of crops, should be planted two years in cotton, as the first year the finer stems and leaves are sufficiently converted into humus to be appropriated as plant food, leaving the coarser stalks and weeds to come into play the second year. Thus, a rotation of two years in cotton, and one in oats—applying cotton seed and guano as indicated-will give remunerative crops and keep the soil supplied with the three great principles which have been and are being exhausted from it, viz: Humus, Nitrogen and Phosphoric Acid. E. M. PENDLETON.

### Cheapness of the Cotton Lands at the South.

In the correspondence between the Commissioner of Agriculture and a Committee of Carolina Planters, published in our last, the question was asked, "if the result of cotton planting was so profitable, why have not the cotton planters grown rich from the six crops

made since the war?" To this the committee makes a reply, which from the pressure upon our pages at the time, we were compelled to defer until the present number. Although reference is made directly to cotton lands, yet the answer may be found applicable to agriculture generally at the South. The committee says:—

"Land is cheap because it is superabundant and out of all proportion to labor and capital. Our capital was destroyed by the war; and capital has not come here from abroad for permanent investment, partly on account of ignorance concerning the profits to be derived from its employment here, and partly from an old-time prejudice against the South, but mainly from the sense of insecurity arising from the universal impression that our State governments have been inclined rather to plunder than to afford adequate protection to property.

It is one thing to make money and another altogether to accumulate wealth. That cotton planters have made money there is ample evidence to show in their yearly production of cotton to the value of nearly \$300,000,000. But why have they not grown rich? When the war ended there was an almost universal disbelief in the possibility of making cotton with free negro labor. Those who first undertook the experiment did so with great distrust, and proceeded with the utmost caution, practicing a rigid economy. The result was that despite a very bad season and a short crop, the crop of 1866 was probably the most profitable ever grown in the cotton States.

The fact demonstrated that cotton could be made, and that cheaply, with free negro labor, and the staple fetching three times its former price in the market, the prospect seemed gold-en. Those who had already been at work sought to double their operations; and others, of all classes and employments, rushed into cotton-planting. The cotton which had gone cotton-planting. forward enabled the merchants to re-establish, to some extent, their credit at the North, and obtain money there which they in turn advanced, often recklessly, to those who sought their aid, but at exorbitant rates of interest. It was not uncommon for men without capital to rent land and get advances from factors at 25 per cent. or more interest, on simple pledge of a crop not yet in the ground, to buy stock and outfit, provisions at hitherto unheard-of prices, and large quantities of com-mercial manures. The most extravagant expectations were indulged, and the most extravagant measures adopted. In short, the country was run mad; traders, merchants, planters, all were making haste to get rich. The crop, notwithstanding all this expenditure, was not a good one, while large estimates were entertained of it in all the great cotton markets, and the price ran down before the close of the year to 13 cents per pound. Planter and factor fell together; thousands of both classes had to give up their business altogether, and the whole country was brought to the verge of bankruptcy. Clearly this disaster could not have followed as the result of legitimate planting, but was brought about by the wildest speculation.

Fortunately there was a large and rapid rise in the price of cotton in the months of January and February, 1868, which enabled those planters who were not utterly broke to get enough money from the remnants of their crops to go on on a more moderate scale. There was a return to the ways of prudence and economy, and sober work, and the crop of that year was a remunerating one. So also was that of 1869. But 1870 was a repetition of 1867; the same extravagance, similar results; thousands ruined, all former profits swept away, and a burden of debt incurred. It was not planting; it was speculating. Again, in 1871, care and economy bore their lawful fruits, and in spite of a bad season the crop paid well. Cotton-planters, forced by their crippled condition to a prudent and economical management of their affairs, have made four profitable cotton-crops; and two, when tempted by success and the hope of getting rich all at once to disregard the only certain conditions of success, which neutralized the results of the other four. It may be hoped that a severe experience will prevent them from being again deluded into speculative planting. With patience and prudent, sober. and steady industry, and such protection from the honest administration of just and equal laws as every government owes to its citizens, a career of prosperity is open to the South not surpassed by anything in her former history.

### Tobacco Beds-Preparation for.

Tobacco is undoubtedly one of the most profitable crops raised in several of the Southern States-but from what has been accomplished elsewhere, it is very certain that there is great room for improvement. We published in one of the numbers of this volume of the Farmer, some very interesting facts connected with the growing of the weed in Connecticut, furnished us by Mr. White, of that State, showing their mode of culture, and the immense profits made by the planters-and we now present an article from the pen of Mr. H. C. Vaughan, of Montgomery county, Tennessee, the centre of the great Clarksville tobacco growing region, which is timely for our readers, as it has reference to the preparation of the tobacco beds in the Fall. The Nashville Rural Sun, an excellent journal recently started under the auspices of a number of the most distinguished farmers and planters of the State, from which we copy the article, says of Mr. V. that he has for

nearly forty years been one of the best and most successful growers of tobacco in the State, and has perhaps had the supervision of as much tobacco in the field as any man to be found, and consequently his experience is valuable and furnishes the kind of information that planters so much need. The editor of the Sun says that his own experience in the preparation of plant-beds coincides with that of Mr. V., that "one rod of land well prepared in autumn will yield double as many good plants at setting time as if prepared in winter or spring:"—

"Autumn (says Mr. Vaughan) If the most suitable season for burning plant beds. In the first place, the ground is in better order now than it will be later; it is dryer, and hence takes less wood and less labor. They should not be burned when the ground is too wet to plow. Farmers know the bad effects of working ground in this condition. Early burning gives more time for the ashes to rot, and thus to make the better plant-food. Ashes improve the soils, more especially clay soils, by making them more mellow and less adhesive. In this respect they act something like lime. The potash in them also enriches the soil. Do not, by any means, remove the ashes, but incorporate them with the earth.

After an experience of at least thirty-five years, I am entirely satisfied that one rod of land burned, and prepared in the fall, and sown in January or February, will furnish as many good plants at setting time as double the area burned at the usual time. I will further state, that, throughout my entire experience and observation, I have never known a bed well prepared in the fall to fail.

My usual mode of preparing beds is this: First, select good, rich, black loamy soil, on a southern exposure, covered with an undergrowth of some of the following kinds: hazle, sumae, black gum, pawpaw, or scrub hickory. This should be shrubbed off with an axe, and not grubbed with a hoe. Now rake off the leaves as clean as possible, and, if brush is to be used, begin at one side of the bed, and make a layer of brush about four feet high, and the same in width. Against this layer set up brush inclined about ten degrees from the perpendicular, and continue this until ten feet of ground is covered. It would be well then to set up a row of poles or sticks of wood ten feet long, and then begin with the brush again and cover ten feet more. Then poles as before until the ground is covered. Should brush not be convenient and old rails are used, (which are better,) lay down skids every four feet, and cover with the rails two or more in depth. To this set fire.

If the ground is dry this will be wood sufficient to burn the soil hard enough, which may always be known by the reddish cast. After it has cooled off dig up with a mattock, or break up with narrow coulter, being very

careful not to reverse the soil, as many good beds are ruined by turning the clay to the top. After it has been dug up, continue to chop and rake until it is thoroughly pulverized. Now dig a trench all round so as to prevent the water from running over. Inclose it with a substantil fence, and let it lie, receiving the ameliorating influence of freezes until January or February. Then, when it is sufficiently dry, slightly stir the surface with a rake, and sow a level table-spoonful of seed to ten yards square. Do not now tramp, or rake, but wait until the bed is frozen, or very dry, then take brush, free of leaves, and cover thick enough to retain the moisture, but not to exclude the light. This brush should be kept on until the plants cover the surface.

It would be well enough just as the plants begin to come up, which in this latitude is about the first of March, to resow the bed with the same quantity of seed. It is not necessary in this resowing to remove the

brush.

In order to protect the plants from the ravages of the fly or insect, various methods have been tried by me. I have found the most effective to be the tying a hen, with young chickens, in the middle of the bed. I have never known this to fail, and have seen many fine beds saved by it, when all other remedies had failed."

### Grasses at the South-Blooded Stock.

In our last, we alluded to the progress made in sowing grass seed at the South, and gave an extract from a letter from Mr. Witherspoon, of South Carolina, corroborative of the fact. Mr. W., under date of October 26, informs us that he had just returned from his County Agricultural Show, held at Cheraw, where, notwithstanding the unfavorable weather, the attendance was pretty good, and there will be no money lost by the joint effort in that line. He adds:

"I was pleased to hear at the Fair, of so many clover patches seeded and about to be. A gentleman told me he had seen a field of clover, just above Cheraw, of fifty acres, which was as good as any he had ever seen in Pennsylvania or the Valley of Virginia. The owner housed all he wanted, and then invited his neighbors to come in and cut and haul all they wished. This success with the grasses seems to have infused new ardor into our people, and gives us hope of a brighter future, God only knows how much we need something to cheer us, ruled as we are by a set of harpies who, like the horse-leech, are never satisfied."

We incidentally alluded to the fact of having sent to Mr. W. a beautiful young Alderney heifer, which arrived out in time to be exhibited at the Fair at Cheraw, and was so much admired that he was offered for it nearly twice the original cost. He adds: "She bore off the blue ribbon in competition with some good calves of her class, among them a very handsome Devon heifer exhibited by me, a descendant of one you sent me before the war."

Mr. W. expected to exhibit the heifer at the then approaching State Fair in South Carolina, in competition with other Alderneys, and says that her introduction into his neighborhood has caused quite an inquiry for this breed of cattle from the planters at the Show, which, we have no doubt, will induce our sending others in the same direction. From the following remark, it appears that this is the first Alderney that has been brought to Society Hill district:

"The little heifer, as I supposed she would be, was a novel sight to nearly all the visitors at the Fair, and attracted more notice than any other animal, except the horses, of which we had a very creditable show for our poor county. I was on the committee on horses, and we gave the prize for the best saddle horse to a fine, high bred mare which had plowed all summer, making for her owner, without the help of any other animal, 200 bushels corn and twenty bales of cotton. So much for blood. She was driven also in single harness, where she made a handsome show, and was then ridden in a tournament. I took the liberty at the Fair, of commending the "Farmer, and yourselves as purchasers of stock. harm I hope."

[None in the least—we thank our friend for his kind consideration of us; we flatter ourselves that he is not only conferring a favor upon us, but also upon his neighborhood. We have before alluded to a case in point, of having sent a pair of Alderneys to Tennessee, just before the war, and since we have recommenced our labors with the Farmer, the gentleman to whom we sent them, informed us that from that pair, the breed had been disseminated throughout that section of the State.—Eds. A. F.]

### Original Correspondence.

Buckwheat as a Fallow for Wheat.

Mesars. Saml. Sands & Son :

My Dear Sirs: Some time in September I received a letter from a young brother of our craft, who had been induced by an article he had seen of mine, in your Farmer, to try his hand upon buckwheat as a fallow for wheat, and asks of me some several questions as to

its effect, &c. Then I was too unwell to write at all, and am in rather poor plight even now, but will do the best I can to cheer him on in his efforts, I think, in the right direction. In the first place, my young friend must have a very good foundation on which to operate, and must have prepared his land in farmer-like style, and was blessed with a first-rate season; for he informs me much of the straw was over six feet high. The like of that is not often seen in Old Virginia, and I very much fear his was too thin for a good fallow. I would greatly have preferred its being double as thick and but half as tall; it would have ploughed in much better, (as the branches could not have so interwoven,) and would, no doubt, have been a far heavier crop, and would have yielded a heavier crop of wheat, and its good effects upon the land and future crops would have shown for many years longer. So thus far my young brother has beat me, of whom he asks advice. Go on; do not become weary in your well-doing, and soon, I fondly hope, you will be dealing out the best kind of advice through the American Farmer

Question 1. Will a crop of buckwheat turned down, enrich the land to any consider-able extent? I made my first application of buckwheat for a green fallow for wheat some thirty years ago, upon a lot of creek bottoms, which had been very much damaged by an overflow years before I purchased this farm, it having been manured and prepared for to-It was swept off to the depth of the ploughing, and was in rather a poor condition for any crop, especially for wheat. With all of my best efforts, I don't believe I ever made over three for one on it. I had it in corn, then oats; immediately after harvest I ploughed it with four horses, harrowed and rolled until it was in beautiful order; then seeded about a bushel of buckwheat and a bushel of plaster per acre, and rolled it again. I was blessed with a fine season; my friends urged me to cut it for the grain; it was a magnificent crop. I think I had to roll it before, my No. 6 Livingston plough. I then rolled it nicely, and let it remain about two weeks; then sowed two bushels of white wheat per acre, and made, I think, over twelve bushels for one, of as good wheat as I ever saw. This lot has been in tobacco, corn, oats and wheat, and timothy meadows; and I now esteem it as one of my brag lots; it is now in its fifth crop of grass, and next spring I will show it against any lot in Albemarle county, Va.

Question 2. Will it increase the crop of wheat? This has been fully answered above.

Question 3. Do you not think a crop of clover of more value as a manure? I do; get your lands strong enough to bring good clover, and with plaster, lime and clover, and good management, we of Virginia can make our lands just as good as any reasonable man could wish.

Question 4. Is it a good preparation for clover and timothy? This also has been fully answered.

Question 5. What kind of soil have you?

Many kinds even in the same field; but upon all of my lands I have found buckwheat and peas, and any and all green fallows to act well. I would much prefer the pea, buckwheat and clover fallows, with plaster and a couple of bushels of oyster-shell lime, to any of the new fangled manures by which our Virginia farmers have been well nigh ruined. My crop of wheat this year is better in quality and quantity than any crop made with bought manures since 1858, and I had it on buckwheat, pea and clover fallow, with only a ton of plaster and a ton of lime. Owing to a ton of plaster and a ton of lime. Owing to my bad health and the great drouth, I was not able to prepare my lands for the pea and buckwheat fallow as largely as I had intended, but what was prepared and seeded shows well. and from it I confidently expect as fine a yield as any of my countymen can get from their heavy outlay in bought manures. I sometimes hear it said our Virginia lands do not produce as in the good old times of Old Farmer John Rogers, of Albemarle, and the good and great man and farmer of Virginia, Mr. Rich'd Sampson, of Goochland. Are their farms, or are any farms in Virginia managed now as was theirs in their days? No, not one. Who has seen anywhere such magnificent cloverfields as could be and were seen every year, cold or hot, wet or dry, on the farms of those two truly good and great men of Virginia, and the very highest and best authority which can be given in favor of green fallows is the well-known expression of Mr. Richard Sampson, Virginia's most successful farmer, when he said, as he often did, "I owe my success, as a farmer, to the pea fallow." Any one can see, much, if not most of our lands are covering in filthy briars, thistles, &c. Our crops of wheat, much lessened in value by the cockle, cheat, oats, and almost something of every-thing else besides wheat. Now, I claim one great benefit of the pea and buckwheat fallow to be the thorough cleaning out of every filth, such as oxeye, thistle, cheat, carrot, &c. In May, so soon as all the seeds have gotten up, so that a thorough ploughing and harrowing will destroy them, start your ploughs to fallowing on your filthiest lands, and with that ploughing and the harrowing the seeds sown, and then fallowing them in and sowing clean seed wheat, you will, beyond a doubt, have secured a clean crop of wheat and a clean grass crop; and my experience is clearly and decidedly in favor of light or no grazing at first, and permitting our grass lands to remain much longer unploughed. I am clearly of the opinion the briar and mowing blade and mattock are now more profitable in Virginia than the plough and our present labor. Some of the very best grazing lands I own, have not been ploughed for some thirty years. Now will my young friend or some one else kindly answer me a question. Not being able to plough up all of my field for wheat before a heavy crop of wild carrot came up, and fearing then to plough it, lest I should have more carrot than wheat, I left it to plough next May or June as a carrot fallow

for buckwheat and pea crop to fallow in for wheat, thinking these two green fallows would pay me better than to put it in corn. What say you, my young friend somewhere about Cooksville, Howard county, Md.

GEORGE C. GILMER.

Near Charlottesville, Va.

### "WHAT SHALL WE DO?"

To the Editors of the American Farmer:

We are very much deceived if, to the question now so often propounded, "What shall we do?" we imagine that there is but one reply—nothing! Politically, it is true, we are bound hand and foot. Morally and intallectually we are still freemen, and if our manhood is not utterly crushed out, it will manifest itself in diligently manuring and fructifying that field of labor in which we need apprehend no interference on the part of politicians.

Messrs. Editors, it has been truly said that the man who causes a blade of grass to grow where none grew before, is a benefactor among men. How great a benefactor may he be considered who can succeed in convincing the agricultural mind that successful farming is impossible when the cultivation of the man does not go hand in hand with the cultivation of the farm! "Knowledge is power" is an aphorism of peculiar significance to the farmer at all times, and of especial significance to him in these days of poverty and struggle; but, while science is opening page after page of valuable instruction, and practical men are testing the truth of her teachings and reducing them to "Simple and Easy Lessons for the Million," how few of the million are there found to apprehend the benefit thus brought to their very doors. Here and there you will find the grasp of prejudice relaxing and the gloom of ignorance disappearing when the light is too palpably dazzling to permit further plodding in darkness, but that thorough diffusion of agricultural knowledge so much needed to build up and renovate the shattered prosperity of the South, is manifestly wanting, and will continue wanting, until greater effort is made, by those who recognize its necessity, to infuse a spirit of earnest inquiry amongst those less alive than themselves to the importance of the occasion.

Much good—I had almost said incalculable good—would be the result if systematic effort was made in this direction. There is a vis inertia where cultivated intelligence is the exception, not the rule, that can be overcome only by patriotic and persevering labor from centre to circumference. As it is a common saying that money makes money, so it is just as true that knowledge creates knowledge, and where knowledge is not, or where it is limited and circumscribed by imperfect education, there will be but little if any effort made to obtain it. Let, then, every intelligent farmer whose moral nature is elevated above the standard of those who take for their motto "Self's the Man," recognize the duty

incumbent upon him to incite, by every means in his power, an interest in the acquisition of agricultural knowledge among all over whom-

he has or can obtain influence.

All this, I am quite aware, looks very much like a recommendation to all our reading and thinking farmers to become pains-taking missionaries. Why not? Are we not asking "What shall we do?" Here is a work of a very practical kind, and one in which the laborers will not only be worthy of their hire, but will assuredly receive it in full measure, pressed down and running over. agitation we have had ad nauseam; let us try a more profitable and less sickening road towards reconstruction.

We can safely promise all travellers on this highway that they will not be elbowed aside on it by any of the carpet-bagger fraternity, nor will they be called upon to "stand and deliver" their little pack ges of "American Farmers" or any other "loose change" of a similar kind they may have about them.

In these days of rapid progression (so-called) it may be regarded as savoring too much of old-fashioned prejudice to quote from a volume much esteemed by our ancestors as an inexhaustible treasury of wisdom and knowledge, but whether so regarded or not, few will be found to deny the truth that "no man

liveth to himself."

Morally, intellectually, politically and agri-culturally, there is no man living who does not, more or less, influence his fellow men, and if the responsibilities inseparable from the possession of this influence were not so lamentably disregarded, the education of the masses would not be so deficient and ineffective as it is.

The lukewarm interest in education, the grudging support given to all efforts to promote it, can be imputed only to that want of appreciation of its supreme importance, to be expected from those who have themselves no, or little, experience of its value. How shall this interest be excited; how shall the uneducated be roused into liberality for themselves and their children, but by the intelligent intervention of those who have themselves tested its value?

But, I am presuming upon editorial indulgence, and would thus briefly sum up the re-

flection above

Progression in agricultural knowledge is a necessity for the South. In the large majority of those who most need it, deficient education will be found a serious obstacle towards its attainment. Surely it follows that both patriotism and principle should incite all who claim to possess cultivated intelligence to bend themselves vigorously to the effort of awakening, encouraging and assisting those of their fellow-agriculturists who are blindly groping in ignorance, unconscious that there is light abundantly provided for them, inviting them to a higher and yet higher position of civilizing, refining and profitable knowledge.

Without enthusiasm very few noble and great works are accomplished. Let there be

a little warmth thrown into this effort to ameliorate the condition and elevate the intelligence of our agricultural fellow-citizens, and we shall be more than satisfied with the results of our labor.

South Carolina, Oct. 31. SPECTATOR.

[Our correspondent "hits the right nail on the head," in his suggestions for improvement at the South. Now is the time for an earnest effort in that direction, and we can, with all confidence give an assurance of the cordial co-operation of the old "American Farmer" in the good work in hand. This is just the right moment for an effort to increase our subscription list, as a new volume begins with January; and if, as suggested by our correspondent, men of influence will feel it a moral obligation to introduce our journal among their neighbors, great good will undoubtedly be accomplished to all concerned. Our pages will be found filled with practical, reliable, substantial matter, embracing the needs of every department of the Farm and Plantation-and the low price at which it is published, (\$1.50 per annum;) is very materially decreased by any one getting up a club of five, at \$1 each -or, by taking a little pains in a neighborhood to raise up a larger club, any of our liberal premiums may be obtained. Will our friends try it ?-Eds. A. Far.]

### WHAT SHALL WE DO?

To the Editors American Farmer:

This question has gone the rounds, Mr. Farmer, in your paper for months past, without eliciting a satisfactory reply from any one. The answers are old and stale. Plant fruit, says one; sell your land, says another; divide into small farms, says a third, all of which we already have had rehashed to us for the last thirty years. The question when first started by the Hon. Willoughby Newton, we thought would lead to the solving the question by showing us where and how we are to get The labor of the South being demorlabor. alized, it becomes the question of questions with us. No one has satisfactorily answered it save Judge Brockenbrough, of Richmond county, Va .- and he only incidentally and indirectly upon another question. The Judge says in the Farmer of November, "The fact is obvious, that the success of every portion of our vast country has always been directly in proportion to the population secured. No portion of the United States is to-day over populated, and but few sections which are not making earnest and persistent efforts to increase their numbers. How necessary then that Virginia, whose best blood and treasure has been so recently lost, whose property of every description has been destroyed, should

awake to the importance of the great benefit

to be derived from immigration.'

These words, Mr. Editor, cannot be too oft repeated in the ears of the Southern people. They should be bound in letters of living light around the neck of every truly patriotic heart, and be made the household words upon every living tongue south of Mason's & Dixon's line. Population, an industrious and ingenious population, is the true wealth of a nation. We propose to suggest the only source of labor for the South. The small mite to be looked for from the North is of a too limited nature to supply our wants; besides, the West is getting all the surplus labor and capital that the North can spare.

'Tis true we get a few, and very few, and as a general thing of the very worst description; still they should be encouraged and treated kindly. We would now direct attention to our proper supplies—to Europe and then to Asia—here we have abundant supplies of whatever materials we may want in that line. Upon reference to the census of Europe for the year 1851, (the only census we con-

veniently have access to,) we find:

Square miles. Population. to sqr mile. 27,619,866 Great Britain, 118,948 232 11,313 Belgium, 4,357,000 385 France, 203,736 35,781,628 174 100,439 19.365,032 Italy. 193

To the above list may be added Germany, Prussia, and many other of the minor States, all overflowing with a surplus population, ready to come over and solve at once the above question of "What shall we do?" It must be borne in mind also that 25 or 30 per cent. must be added to the populations as set forth in the above tables. Then comes set forth in the above tables." Asia with a redundant population of ingenious and industrious artisans, who would help to solve this question and set our hearts at rest about the future of our section. The question now resolves itself into one of dollars and cents, with a little will combined. Dodge the question as we may, this is our only refuge upon this point. Give us labor and we will guarantee that there is mind, intellect enough in the South to judge who shall plant fruit or who raise sheep, &c. &c.

Then there is another question or another side to this question, which, however much we may dread to meet it, must be met, and that is: although Cuffee is with us, he is not of us; he will work for something to eat and drink, and something to wear, and when that is said all is said; he will tell you by words and acts, that this is not his country, and therefore he does not care for the glory of it. To him the names of our revolutionary fathers has no charm, it does not and will not cause a flow of genuine patriotism to swell his heart, therefore we cannot expect much from him. We know of but one law or rule of action that would tempt the negro to feel proud of our Southern people and country, and that is "Miscegenation." Horrible!

Yours truly, OLIVER N. BRYAN. Charles county, Md.

# Our Agricultural Calendar.

### DECEMBER-FARM WORK.

The matters and things requiring the attention of the farmer and planter for this month, are not necessarily very numerous, as the outdoor work will pretty generally have been gotten through with ere this. And as to other matters peculiar to the season, such as preparation for tobacco beds, management of stock, the care of fruit trees, &c., &c., some valuable instruction will be found in the communications of our able correspondents, and other articles which will be found in the present number. And, indeed, we have in several of our last numbers gone over the whole ground so thoroughly, in advance, that what we may now add will be almost a repetition of what we have already published. Still, we understand human nature sufficiently to know the necessity of repeating "line upon line, and precept upon precept," to induce mankind to lay to heart some of the most important duties which may be presented to their consideration.

Fire-wood. - As we are great sticklers for the comforts of the home circle, one of the first things which we would impress upon the attention of the head of the family, is the duty of securing ample supplies of fuel. The work of the woman in the country, at the best, is most laborious, and the good husband and master will see to it, that the wood pile is seasonably replenished, and the fuel placed under cover and within easy reach, so that there shall be no necessity of trudging through mud and slush, rain and snow, to obtain the daily supply. In addition to this consideration, there is another to prompt attention to this work-most generally the fuel is to be hauled some distance from the wood-lot, and if neglected to be cut and brought in, at the proper time, the additional labor upon the poor beasts, in trudging through the roads broken up by the frosts, should be an inducement to have this job attended to promptly. This is enough to say upon this subject, we hope, to induce every friend of humanity to give heed to our suggestions.

Materials for Making Manure.—In the remarks of Mr. Greeley at our late Cattle Show, the importance of attending to the gathering of materials for making manure, is urgently impressed upon the farmer—we have, times without number, taken the same ground, but we feel that we cannot too often impress upon our readers the necessity of attending to this duty. Without manure, it is impossible to make farming pay—the labor

of preparing the ground, and the cost of seed, and the other requirements for getting in the crop, are the same, for a poor soil as a rich, and if there is a deficiency in the supply of plant food, the result will be a vast difference in the vield-one-half or one-third at leasttherefore no effort should be spared to gather all the refuse upon the farm, and its vicinity, to increase the compost heap-in forming the same, bringing the earth and vegetable matters from head lands, fence corners, woods mould, river, creek and marsh mud, peat, the sod from fields covered with sedge grass, the scrapings from road-sides and ditches, sea ore, weeds, cotton-seed; in a word, any sub-stances having in them vegetable and animal remains, are good to enter into such composts -but with every two loads of such matters, there should be mixed one load of barn-vard or stable manure—and as the progress is made in building up the compost heap, a bushel of plaster should be sprinkled over the same, for every twenty loads of the rough materials named—the heap should be of a conical shape, patted down, and dusted over with plaster, to draw the gases from the air to it— if no better covering for it can be given, pine or cedar brush will be found useful. The mixing of the stable manure with the rough materials is to cause fermentation, and produce decomposition, thus producing a more rapid action, and rendering the mass fit for the Spring crops. Guano, bone dust, ashes, fish, &c., will answer in place of the barn-yard or stable manure, to produce fermentation and decay, when mixed with the rough materials, but without some such stimulants, the materials gathered cannot be made quickly to dispense their nourishing principles into the growing plants, and the manure will lay the longer dormant and have but little effect upon the crops to which it may be applied. When the fermentation is commenced, before the time for hauling out the manure arrives, the heap should be turned over and the contents thoroughly incorporated, to produce equality in the strength of the manure, and at the same time to let in the atmospheric air, which will give an impetus to the decomposition, and render it more valuable. Of one thing, in addition, let us remind you, that whatever ingenuity your own mind can suggest or the practice of your neighbors will present, to enable you to secure the liquid voidings of your stock to be mixed with your composts, you will find it to contain the richest portion of your manure.

Fattening Hogs.- In our last, we enlarged upon this theme, and again refer to it only for the purpose of urging, in connection with the manufacturing of manure, of which we have just spoken, that you will not neglect the hints given to supply the pens and yards with the raw materials for making a rich ma-The offal of swine is perhaps more powerful than that from any other source of supply for manure, and no particle of it should hauled and all necessary repairs made be-

be wasted, but every means devised to extend its supply by an admixture with other less valuable substances

Winter Ploughing .- At every fit opportunity that presents itself through the winter, ploughing should be done for the spring crops. The effects of the atmosphere upon the turned up soil, in winter, is considered by many experienced farmers, as almost equal to a good dressing of manure-indeed they believe that the difference in the crop, all things else being equal, is an addition of one-half in the yieldsee that in ploughing, the land is in a proper condition,-moist, but not too wet or too dry.

Treatment of Milch Cows .- Interest, as well as humanity, will prompt to the giving extra care to these valuable animals during the winter. In our pages this month, will be found ample instructions upon this point, which, we hope, will not pass by unheeded. We have the best of instructors upon this subject in our columns, to which we and our readers are deeply indebted. Give them air and exercise as far as possible, and be sure to secure to them ample supplies of pure water.

Shedding and Stabling for young stock should be prepared, if not already on hand. Young cattle, particularly, should have access to shelter in cold stormy weather; it is bad policy to let them, or stock of any kind, go back in their condition through the winter, as it will take the longer time, and a greater amount of food to get them in order againit is poor economy to stint them at any time, or at any age, but if young stock are once stunted, while in a growing state, they are apt never to get over it, or to make a fully developed or fully grown animal at maturity. Salting stock of every description should not be overlooked-once or twice a week should this be done; or what is better place a lump of rock salt in positions where they can at all times get access to it.

Sheep.-Sheep thin in flesh should now be sorted from the flock and given the advantage of extra feed. In most flocks where there has been a natural increase, many of the ewes have been reduced in flesh by sustaining two lives, and such will be very likely to furnish a pelt before spring, unless properly fitted for winter. The way to keep a strong, healthy flock is not to let any member get

Gates, Fences, &c .- These should be fixed up, or got in order, during this season. Wherever it can be done, substitute gates for the bars on your farm.

Tools and Implements should be over-

fore putting them away for the winter—a little oil and paint may be the means of saving you much damage and loss of time when you are more hurried. Oil your gears, harness, &c., and all kinds of machinery.

# Live Stock Department.

### Jersey, Alderney and Guernsey Cattle.

A correspondent at the South writes: "I have seen but few Alderneys, and know more of them from the papers than from my own observation. What is the distinction between Jerseys and Alderneys?" We find in a little work, a notice of which is elsewhere given. "The Jersey, Alderney and Guernsey Cow," an account of the Channel Islands, in which group are included those giving names to the several breeds of cattle under notice. writer says these islands lie in a deep bay of the northwest coast of France, opposite to the centre of the south coast of England. Only four of them are inhabited; Sark, by one family and their dependents; Alderney, by the Government officers of the Harbor of Refuge, and a few fishermen; Guernsey, by a thriving seafaring population; and Jersey, by one of the most complete colonies of small gentility possible to conceive.

Another writer quoted in the same work says: "Although the Jersey cow has been the subject of much notice in different publications, and is known to all who turn their attention to Agriculture, still, some remarks on the originality, value and peculiarities of the breed are indispensable. The animal known in England and elsewhere, under the name of Alderney cow, is the same which is now under our consideration. The reason for the breed going under the name of Alderney is, that from that island the first were exported to England. At present but few are obtained from Alderney." This being the case, and there being annually 3,000 cows and heifers exported from Jersey, it would appear that practically there is no difference between the Jersey and Alderney cows of the present day, the latter being the popular but inexact title by which both are known-though in the Herd Register of the American Jersey Cattle Club, no animals are admitted to entry unless they can be traced back to the Island of Jersey.

We quote, however, (again from the useful little book already named,) from an essay in the Journal, for 1844, of the Royal Agrl. Society of England, by Col. Le Couteur, a resident and official of Jersey, who takes a different position as to the identity of the two breeds, and asserts that "the race is miscalled Alderney, as far as Jersey is in question, for about seventy years since, Mr. Dumaresq, of St. Peter's, afterwards the Chief Magistrate. sent some of the best Jersey cows to his father-in-law, the then proprietor of Alderney; so that the Jersey was, already at that period, an improved and superior to the Alderney race. It has since been vastly amended in form, and generally so in various qualities, though the best of those recorded at that period gave as much milk and butter as the best may do now." As Alderney is a very small island, having an area of only about seven square miles, the very introduction of the animals from Jersey, to which reference is had, probably resulted in so thoroughly commingling the two breeds, if before distinct, as to leave the distinction between them now of slight, if any moment, especially as we learn from another later authority, that few animals are now exported from Alderney.

Between the Guernseys and the Jerseys and Alderneys there is a considerable and easily perceived difference, and in all the literature of the subject, we do not know where we can put our finger on a better or more critical description of the distinguishing characteristics of the two breeds than in the paper on the subject, at p. 52 in the Feb'y No. of this volume of the Farmer, by Mr. L. E. Rice, of of N. J., a gentleman by whom both of these classes, as well as the Ayrshires, are bred

with great care and zeal.

The following abstract of a description of the Jersey (or Alderney,) and also of the Guernsey cattle, is from the pen of Dr. L. H. Twaddell, one of the earliest of the breeders of Jersey cattle in this country, who visited the Channel Islands in 1865, and soon after his return made a report to the Philadelphia Society for Promoting Agriculture:

"The Jersey cow is of medium size. Her peculiar deer-like aspect distinguishes her from the Guernsey. Her head is long and slender, the muzzle fine, and usually encircled with a lighter color; the hose is black, and the large, dreamy eyes encircled with a black band; occasionally the nose is of a buff color, when there is a corresponding buff band around the eye; the horns are usually short,

small at the base, tapering and tipped with black." (This is one of the requirements of

the Jersey scale of points.)

"The limbs of the Jersey are very slender and fine, her hips broad and developed, her neck is slender and rather long, and the body in the best specimens rotund, and approximating to the Short-Horn model somewhat, yet with sufficient angularity to ensure milking propensities.

"The Jerseys are of all shades of color, from a pale, yellow fawn, running through all the intermediate hues, even occasionally to a red, an intermixture of black or gray, known as French gray, and that merging into black, with an amber-colored band along the back, the muzzle invariably shaded with a light color, and individuals are often seen black and white, or pure black, unrelieved by any other color. A yellow brindle is sometimes seen, but this is by no means a favorite."

"The GUERNSEY is a larger animal, coarser in the head and heavier in bone; the horns are larger and thicker at the base, not usually crumpled; the rump is more apt to assume that peculiar droop which seems a characteristic of the breed, and there is a want of that symmetry and neatness of form that mark the highly bred Jersey, but as a dairy cow she is fully her equal; for quality of milk and butter she cannot be excelled; the skin is of a splendid, rich, yellow hue, and the udder and teats are tinted with chrome. The head of the Guernsey is larger, and the muzzle broader, and the eye not so prominent as the Jersey; the nose is usually of a rich yellow or buff; the eye banded with the same color. colors of the Guernsey are fawn, running through the various shades to a deep red, an amber brown, and a peculiar yellow brindle, which is a favorite here. Altho' larger than the Jersey, they do not fatten quite as kindly as the latter, which has the advantage of a smoother and more rotund form."

### The Jersey Herd Register.

Messrs. Samuel Sands & Son :

The entirely novel rule adopted at the late Maryland State Fair of offering separate premiums for precisely the same kind of cattle because a part of them were entered on the so-called Jersey. herd-book and a part not, seems to invite an examination into the getting up and value of the A. J. C. C. herd-book. Until quite recently, all the cattle from the Channel Islands except Guernsey, were classed under the common name of Alderney, and they have been so entered and awarded premiums at all the State and County Fairs of which I have any knowledge up to this time, with the single exception above named. Soon after the note of preparation for the A. J. C. herd book was sounded, I wrote to Mr. Sharpless, of Philadelphia, who was said to be the leading man, asking if the older New England importations would be admitted to entry. In reply he said the managers had de-

cided that no cattle should be entered that could not be clearly traced to the Island of

Jersev.

Knowing that such a decision would rule out the best Channel Island cattle ever imported, namely: the importations of the Massachusetts Agricultural Society, J. A. Taintor, Wm. Billings, John T. Norton and Roswell Colt, of Paterson, New Jersey, I called on the late Robert L. Maitland, the best known and most successful of all the more recent importers, and asked his advice. He said, "Have nothing to do with it, sir; of all the cattle I have ever imported, I cannot name one that came from any particular island; my brother has bought all my cattle either in London or Southampton, and neither he nor I were ever on one of the Channel Islands."

The manner in which Mr. Maitland's cattle were purchased accounts for their uniform supericrity; they were not bought, because they were of solid color and had black tongues and tails, but because they were good. I thought with Mr. Maitland that a herd-book that ruled out the before-mentioned importations, with such animals as the Hungerford cow Angelina Baker, Jura and King Philip might safely be

let slone.

I do not contend that a herd-book cannot be made valuable. It certainly can be; but the cattle entered must pass the scrutiny of real judges, not new men who have a few cattle to sell and no customers to buy them. A herd book should not be an advertisement, but a certificate of purity and merit. All the cattle bred on the Island of Jersey are neither pure nor good, although the breeders may think they are. A herd-book's committee to pass upon cattle should know this, and admit only such animals as can not only show a clear record, but a clear right to entry on account of their purity and good qualities. At the late State Fair at Waverly, N. J., a bull was entered for a premium, and with him came a bill of sale from a high officer of the A. J. C. C., with the herd-book record and number. He was ruled out as a grade, being part Jersey and part Guernsey.

It may be worth while to notice a few of the ukases of the managers of the herd-book in question, since it fairly got on its legs. 1st. All the Fowler and other importations

1st. All the Fowler and other importations received up to this date will be entered on presentation of satisfactory evidence of their importation from the Island.

2d. No such animals imported after June 1, 1872, will be admitted to entry unless they or their sires and dams are already entered in the herd-book of the Royal Jersey Agricultural Society, which fact must be certified to by an officer of that Society.

3d. Under no circumstances will any animal imported by, or on account of a dealer, from this time forward be admitted to entry.

This 3d rule clearly does two things; it prevents any further entries by any of the officers of the club—for they are believed to be dealers, all of them—and it also shows the limpid clearness of their heads.

Another ukase provides that, after a given date—I think the 31st of December next—no further entries can be made except, I presume, the progeny of those already entered. This is supposed to mean that the managers have got all the cattle they want, and so it is time to close the books. Any sensible layman would be inclined to inquire why any good and pure animal should not be entered next year, or at any time within this or the next century.

I will not exactly contend that to enter an animal on the record of the A. J. C. C. herdbook is to slander it and give it a bad name, but I have not a doubt that there are in this country better Channel Island cattle and more of them not on the herd-book than on it. If

country better Channel Island cattle and more of them not on the herd-book than on it. If any purchaser of Channel Island cattle thinks to get better animals because they have a name and number on the A. J. C. C. herd-book, he will surely come to grief.

L. E. RICE.

Princeton, N. J., Nov. 8, 1872.

### THE SHORT-HORNS.

[Concluded from page 239.]

As will be seen by the previous article, Mr. Thorne had one of the finest herds in America: however, for reasons unknown to the writer, he gave up breeding, and in "The Country Gentleman" for April 4th, 1867, the following announcement was made: "An important sale of Short-Horn cattle has taken place, which will be quite a surprise to the agricultural public. James O. Sheldon, Esq., White Spring Farm, Geneva, has purchased the entire herd of Sam'l. Thorne, Esq., Thorndale, Duchess county, with the only exception of two bulls." "This is probably one of the largest transactions of the kind, if not the largest, which has ever occurred. By it Mr. Sheldon is placed at the head of what is undoubtedly the leading herd in America, if not in the world. There are, perhaps, one or two which count larger numbers, but we presume no other breeder in the United States or Great Britain has more than one-half the number of pure Bates animals now united in Mr. Sheldon's hands," about 40 head, valued at \$42,300. Mr. Sheldon had been, previous to the purchase mentioned above, a spirited breeder of Short-Horns, and the owner of quite a number of pure Bates cattle. Mr. Sheldon was the owner of a beautiful farm at Geneva, and was as well fixed in the way of buildings, water, &c., as any one the writer has ever visited. His name was known throughout the whole Short-Horn world, and he was the breeder of some of the most celebrated Short Horns of the present day. believed entirely in Bates blood, and all the cattle in his possession were either pure or crossed with Bates. Among the most celebrated of the bulls bred by him were 2d and 3d Dukes of Geneva, (the 2d Duke was sold to Mr. E. G. Bedford, Kentucky, and is now dead; the 3d Duke was exported to England,)

4th Duke of Geneva, and "6th Duke of Geneva." Among the cows I would mention especially 10th and 12th Duchesses of Geneva, two of the most beautiful cows that the writer In 1869 ever had the pleasure of beholding. Mr. Sheldon sold to Messrs. Walcott & Campbell, New York Mills, Oneida co., N. Y., onehalf of his herd, and in 1870 he felt compelled, on account of the illness of Mrs. Sheldon, which necessitated travel abroad, to offer the other half for sale at auction; but Messrs. Walcott & Campbell would not permit them to come before the public, and therefore bought them all. These transactions were the largest that had ever been made in Short-Horns at any time, amounting to the neighborhood of \$200,000. Messrs. W. & C. had, previous to purchasing from Mr. Sheldon, a select herd of Short-Horns, and have continued to import and breed fine animals. They imported in 1869 some of Mr. T. C. Booth's breeding, among the number the bull "Royal Briton" and the cow "Bride of the Vale." For "Bride of the Vale." For "Bride of the Vale." Hey gave 1,000 guineas, and with the express condition that she was to be taken to America, as Mr. Booth would not part with a female of her tribe to be retained in England. This leads me to speak of the Booths, who have established a family of Short-Horns quite as celebrated as "Bates' Duchess tribe." To quote from Mr. William Carr's history of the Booth herds:

"It is my present object rather to trace the progress made in this direction by the late Mr. Thos. Booth, of Killerby and Warlaby, and his sons; a history intimately interwoven with and inseparable from the history of the Short-Horn breed itself, for Mr. Thos. Booth was no servile imitator. He was a contemorary of the Collings, and began his career quite independently of them, as an improver of the cattle of the same district, and he commenced it nearly at the same time. Mr. Booth had been a breeder of Short-Horns many years when the celebrated Durham ox, bred by Mr. Charles Colling, was exhibited through-out the kingdom, and drew universal attention to the Short-Horns. He afterwards did what wisdom dictated, availed himself of the Collings' best blood and incorporated it with his own; while his sons and grandsons at Killerby, at Studley, and at Warlaby, have continued the same herd down to the present time, and given it a world-wide fame.

To this book, by Mr. Wm. Carr, I would refer all who are interested in the history of Short-Horns. I hope I may, however, be allowed to make one more quotation. On page

74, he says:

"Another branch of the Halnabys springs from the sister of White Strawberry, Strawberry 3d, by Young Matchem, himself of the Halnaby family." From her descended Bagatelle by Buckingham, a fine large cow, very wide in the floor of the chest, and with capital thighs, back, and loins. Her only weak point was a rather too upright shoulder. She was not, however, quite so elegant in form as Isabella Buckingham, to whom she

stood second at the Exeter Royal in 1850, and at the Leeds Yorkshire Show in 1849. telle produced five calves-White Knight, presented to Mr. John Booth; Warrior, sold to go to America; Butterfly and Benevolence, and Binnea by Leonard. Binnea gave birth to Bridesmaid by Harbinger, Bride Elect by Vanguard, and Prince of Warlaby by Crown Prince-a bull which, in Mr. Booth's opinion, possessed more of the character of Crown Prince than any bull he had bred. Prince of Warlaby was for many years on hire in Ireland, where he became the sire of innumerable prize animals. The cow Bridesmaid, of which an admirable portrait hangs over the sideboard at Warlaby, was an animal of deep, circular and beautifully symmetrical frame, with a wide-spread back and loin, long wellfilled quarters and magnificent bosom. won nine prizes at the Royal Meetings at

Lewes, Gloucester and Carlisle. " Bride Elect was remarkable for the extraordinary development of her fore-quarters, and particularly of her breast, the depth and massiveness of which so far exceeded that of any Short-Horn hitherto known, as to have passed into a proverb. She was in all respects an excellent animal, with beautiful head and horns, and admirable quality of flesh: but I shall call upon Caddy again, to describe his old favorite, for I have almost exhausted my descriptive powers; and indeed when you have once done justice to the points and pro-portions of a single average Warlaby Short-Horn, it is but as a twice-told tale to describe others of the sisterhood; for it is the peculi-arity of these tribes and their distinguishing merit, that they are all cast in the same mould. With shades of difference and gradations of excellence that suffice for the charm of variety, their conformity in all important points to one standard is so remarkable that it may be truly said of them ex una disce omnes. "Aye! yon's poor ould Bride Elect. Did ter ivver see sic an a breast and sic leeght timbers? Yau wad wonder how sic lile bane could hug sae mickle beef. Look at her could hug sae mickle beef. Look at her rumps and thighs and loins, and aborn au, that breast. Why, there be amaist plenty for two beasts." Bride Elect was the winner of six prizes. Her calves were three heifers — Royal Bride and Bridal Wreath by Crown Prince, and Bridal Robe by Lord of the Valley, and two bulls, Royal Bridesman by Crown Prince, and a roan bull by Lord of the Valley. The former was found hanged at his stake on the eve of starting for his first year's service. He had been let for 200 guineas a year. Royal Bride was a beautiful heifer, with all the substance and shapeliness of her dam. She, unfortunately, took cold, which brought on inflammation in the feet, from which she never recovered. She left behind her one daughter, Royal Bridesmaid, by Prince Alfred, a lovely white heifer, with her grandam's massive bosom and girth."

The Booth cattle imported into this country of late years are destined to make their mark on the leading herds, as they are now being

used by men like Mr. Alexander, of Kentucky, and Mr. Cochrane, of Canada, &c. The pure Booth females in America are, I believe, all owned by Mr. Cochrane, as Messrs. Walcott & Campbell sold all they owned to him in the winter of 1872. The pure Booth bulls in America are, I believe, limited to five, and "Royal Commander," owned by Mr. Cochrane, and "Royal Briton," whose dam, Royal Bridesmaid, is mentioned above. The other three are "Royal Blithe," got by Royal Briton and bred by Walcott & Campbell, now owned by M. H. Cochrane. "Star of the Realm," bred by Mr. Cochrane and owned by A. Alexander, of Kentucky, and "Knight of St. George," bred by Mr. Wm. Carr, Stackhouse, England, and lately sold at Mr. Christie's sale. There are a number of good bulls, with four and five crosses of pure Booth blood, that have been imported into this country from England, and are proving valuable sires.

And here allow me to close my sketch of the history of Short-Horns, by saying, that I know that I have written only a very imperfect article, and that for further information, I would refer your readers to the authors quoted in the beginning of my article, and also to a new work, just published, entitled "History of the Short Horn Cattle," by Lewis F. Allen, a gentleman well qualified by his familiarity with his subject for a number of years, to write the history of the most valuable breed of cattle in the world.

C. E. COFFIN. Muirkirk, Md.

Additions to the Muirkirk Herd.-Mr. Coffin sends us the following list of calves lately added to his herd:

"Vigilant;" roan b. c., calved Sept. 16, 1872; got by 2d Duke of Oneida 9926; dam Victoria 8th by 4th Lord of Oxford 5903.

"Lord Fern;" roan b. c., calved Oct. 3d, 1872; got by Lord Mayor 6969; dam imp. Lady Fern by 5th Duke of Wharfdale (26,033;) g. d. Maidenhair by Grand Duke of Wetherby 17,997.)

"Pinlico;" white, with roan ears, b. c., calved Oct. 7, 1872; got by 6th Earl of Oxford 9984; dam Masterpiece by 6th Duke of Thorndale 4752.

"Ellery Foster;" red, with white marks, b. c., calved Oct. 15, 1872; got by Lord Abraham 11,223; dam Rosaline by Rosy Duke 6142.

11,223; dam Rosaline by Rosy Duke 6142.

"Earl of Muirkirk;" white, with roan ears, b. c., calved Oct. 19, 1872; got by 6th Earl of Oxford 9984; dam Malibran by 4th Duke of Geneva 7931; g. d. Masterpiece by 6th Duke of Thorndale 4752; g. g. d. Moselle by 4th Duke of Thorndale 2790; g. g. g. d. Mistress Gwynne by Grand Duke 545.

"Mattie Lisette;" red, with white marks, c. c., calved Oct. 23, 1872; got by Lord Mayor 6969; dam Chance 5th by Duke of Airdrie (12,730).

(12,730.)
"Elvina's Earl;" red, with white marks, b. c., calved Nov. 18, 1872; got by 6th Earl of Oxford 9984; dam Elvina 3d by 11th Duke of Thorndale 5611.

# THE AMERICAN FARMER

### RURAL REGISTER.

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Baltimore, Md., December 1, 1872.

### Closing of the Volume.

With this number, the first volume of the revived Farmer, under the management of its present publishers, is brought to a close-and we can but reiterate the expression of our unfeigned gratitude to our numerous friends, for the interest they have manifested in its successful resuscitation. In the two last numbers, we have made an appeal to our present subscribers, to give us their aid in the extension of our list-we are satisfied that in so doing, they will not only render a service to us, but that at the same time, it will stimulate an increased interest in the improvement of the neighborhood in which our journal may circulate. We have already received a gratifying response to our appeal, and we anticipate by the time of the issuing the first number of the new volume, that a general renewal of subscriptions will take place; and we again request that each of our present readers will endeavor to procure from among his neighbors and friends an additional name or two, and forward them as early as possible, in order that we may have time to mail to such the first numbers of the ensuing volume. By a little effort, a club of five can be made up.

which makes a very decided difference in the subscription, the price being reduced to \$1 for each-and for larger lists, to those who will aid us in the work, a great variety of valuable premiums are offered in our Prize List, which can be made a paying business to every one having ability, leisure, and some influence in his neighborhood. We confidently anticipate a speedy and liberal response to our appeal. We have no higher inducements to offer, than what we have shown in the conduct of our journal during the past yearcertainly we can promise that there shall at least be no falling off in the value and interest of its contents for the coming volume, and we believe we may count on having increased facilities and advantages in the future over the past. With the old experience of the Senior, added to the young blood infused by the Junior, we may with all modesty claim, that we shall have a team hard to beat in the race which we have commenced. Added to these considerations, we expect to make such arrangements as to secure from able pens valuable communications upon the various subjects which are now becoming so prominent, and demanding the intense interest of the agriculturists of the country, and the more especially those at the South. intend to do our whole duty in the work in which we are engaged-it is not now so much a matter of bread, as it may have been in the past, but a labor of love-yet the solid demonstrations of the approbation of our readers are always grateful, and they are calculated to have the effect of stimulating our efforts, imparting renewed energy, and increasing our zeal. As we remarked on a former occasion, very similar to the present one, we would say, that from the flattering reception and warm commendations which the work has received in all quarters, we feel persuaded that our exertions have been fruitful-and while we pledge ourselves that the American Farmer shall, like good wine, improve with age, we may be permitted to anticipate, that, as the cause of agriculture,-the improvement of the soil, the expansion of the resources of the farming and planting interests, are concernments in which the public weal are involved-we say for these reasons, we may be permitted to anticipate, that each of our present patrons will feel himself, or herself, called upon, by that spirit of enlightened patriotism, which prompts men to acts of disinterested beneficence, to

lend us their influence and services in extending our list.

The time limited for clubs is the 31st March-although our terms are in advance, and the cash always desirable, yet whenever our friends can give us the assurance that the subscription money will be forthcoming by the above date, for any names they may send on, the arrangement will be acceptable to uswe know that a just discrimination will be made in the premises-and whilst we are recipients of their kindness, we cannot require of them to advance the subscription money for their neighbors who may not at the time of solicitation, be conveniently prepared to make the payment in advance. We make this suggestion, having had questions propounded to us, pertinent to the subject.

### To Stock Breeders.

We should be glad to have such farmers and breeders as have stock of improved breeds, of any kind for sale, to furnish us with memorandums of the same. We are in constant receipt of inquiries from the South for all classes of improved stock, and the indications are that we shall do a heavier business in this line than was formerly done by us before the war. If gentlemen who have surplus stock which they wish to dispose of will keep us advised of what they have and the prices they ask for it, it would doubtless frequently result in sales for them, and at the same time save us a great deal of correspondence. We are not actuated in this request by selfish motives only, since in many cases where applied to, sales might be made without our intervention; but we are anxious to contribute as far as we can to the introduction of improved stock into the South, a region doubtless destined to become a great stock growing section. Besides the aid to this which can be given in the way we suggest, we might frequently be instrumental in effecting exchanges of stock-either to prevent close breeding, or in other cases, to change the breeds, &c. We have just now inquiries for Merino and South-Down sheep, Suffolk and Poland-China swine, Brahma and Houdan fowls, and especially for Ayrshire catte-concerning which last see a paragraph in another place.

The Birmingham (Eng.) News says arrangements are on foot for the emigration of half million farm laborers.

### LIST OF PREMIUMS

Offered for subscribers to the American Farmer for 1873. • The subscriptions can either be sent at the regular rate of \$1.50 each, or at the club rate of \$1 each. The table shows the number of names required at each rate for the respective articles named.

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ARTICLES, VIZ:	Value Premi	81.50	81.00
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3. Florence sewing Machine	55 00	75	150
and Vines of same value	5 00	10	20
6. A \$10 collection of Seeds, or of		1	100
7, A \$20 assortment of Seeds or Plants	10 00	20	40
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any of our advertisers	20 00		
8 Sinclairs Straw and Fodder Cutter	25 00 110 00		400
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9. Buckeye Mower  0. Kirby Self-Rake Reaper  1. Woods Self-Rake Reaper, with  Mowing Attachment  2. A pure bred Cotswold, Southdown	190 00	250	€50
or Shropshire-down Ram	40 00	80	120
<ol> <li>A thoroughbred Jersey, Ayrshire, or Devon bull calf</li> </ol>	75 00	100	120
4. A thoroughbred Short-Horn bull calf 5. A pair of pure bred Essex or Berk-	100 00	150	225
5. A pair of pure bred Essex or Berk-	40.00	00	*00
shire pigs	30 00		
7. Silver-l'lated Revolving Butter	10 00		1
8 Silver-Plated Breakfast Castor	8 00		
9. Set of Dessert Kulves, ivory han-	6 00	1	1
O. Superior quality Carving Knife, Fork and Steel	5 00		1
21. Silver-Plated Pie Knife	4 00		
2. Gentleman's Gold Pen and Silver Case	3 00	1	1
3. Solid Silver Fruit Knife	2 00		10
4. Silver-Plated Cream Ladle 5. One year's sub-cription to the	1 00		
American Farmer	1 50		10
6. Champion Mower and Reaper	200 00		
7. Hill's Archimedean Lawn Mower	25 00	40	60
S. American Gold Hunting-Case Watch	56 00	160	200
Watch	25 00	60	120
0. American Cyclopedia	80 00		
1. Webster's Unabridged Dictionary	12 00	20	40
2. Webster's National Dictionary	6 00	12	
3. Silver-Plated Ice Pitcher	15 00		50
1. Silver-Plated Cake Basket	19 00		
5. Silver-Plated Fruit Dish 6. One doz. Silver-Plated Teaspoons	10 00 6 00		40
7. One doz. Silver-Plated Teaspoons.	0 00	12	25
(extra quality)	12 00	90	40
(extra quality)	12 00	90	40
9. Child's Cup	8 00		12

Note.—For any premium in this list, we can substitute, if desired, any agricultural implement for sale by any of our advertisers, agricultural or other books, nursery stock, &c., &c., of the same value as the offered premium.

Subscribers need not all be at one post office, nor is it necessary for the names to be all sent at once.

Send the exact money with each list of names, and state in each letter that you are

working for a premium.

March 31st, 1873, but any premium will be sent upon demand, as soon as the proper number of names is received, with the money, to entitle the sender to the premium designated, but no name will count unless the money for it is paid by or before the date the premium is claimed. There is no competition. Every one gets what he has worked for, and may make his own selection.

Both old and new subscribers count in these lists.

All new subscribers whose names are received before January 1st, will receive three numbers of this volume Free.

Specimen numbers, blanks, posters, &c. furnished on application.

REMIT ALWAYS, when possible, by registered letter, post-office order or draft.

### Special Premiums.

Besides the premiums in the list in another column, to each subscriber who renews his own subscription and sends two new names, each at \$1.50, we offer to forward, postage paid, the handsome and useful book, "The Jersey, Alderney and Guernsey Cow," noticed elsewhere, and the price of which is \$1.50. To each person renewing his own and sending one new subscription at \$1.50 each, we will send, postage paid, the valuable work, "On the Management of the Dairy," also noticed in this No., and the price of which is 35 cents.

We also call special attention to the Beckwith Sewing Machine, which is included in



our list. This is a low-priced Sewing Machine, lately introduced upon the market, at \$10 each, but more recently still improved, and the price raised to \$12. [No more of the

\$10 style made.] The engraving gives a miniature view of the machine, which is japanned and tastefully ornamented, the cloth-plate and trimmings being plated. This machine is recommended by the highest authorities as being "a practically useful, low-priced Sewing Machine, well and strongly made," "simple in its parts, and its use quickly learned," and

running so easily a child can work it. It works by hand and makes the elastic loop-stitch. While of course it does not come up to the merits of such machines as the Florence and the Grover and Baker, it has the advantage, by its low price of being within the means of many who cannot buy those machines. It does almost any kind of family sewing, is easily attached to any table or stand, and is so light as to be easily carried about. Each machine comes in a neat box, and has, accompanying it, a hemmer and guide, oil can, needles of various sizes, &c.

This machine fills a great want, and we offer it with much satisfaction as a premium. We will give one to any person sending us 12 subscribers (new or old) to the *Farmer* for 1873, at \$1.50 each, or 40 at \$1 each.

### Breeders of Jersey Cattle in Maryland.

In our last issue in speaking of the number of herds of fine Jerseys at the late show of our State Society we inadvertently omitted the names of Messrs. James W. and Jesse Tyson, both of whom were among the earliest breeders of these cattle in this State, and whose herds, for excellence of quality as well as the handsome animals composing them, are surpassed, we believe, by none. From the herd of the first named gentleman we have recently shipped a young bull, Alec, to John Witherspoon, Esq., of S. C., and a handsome heifer, in company with another from D. W. Matthews, Esq., to C. Li. Upshur, Esq., of Chuckatuck co., Va.

In our list of premiums at this show the Jersey bull "Jasper," which took the second prize for yearlings, was credited to J. H. Rieman, Esq., instead of to his proper owner, J. Howard McHenry, Esq.

STOCK SALES.—The herd of Short-Horns of Mr. J. H. Pickrell, of Harristown, Ill., known as the Harristown Herd, was sold at public sale on 24th Oct.; 20 cows sold for \$16,910, and 10 bulls for \$6,770; the cows averaged \$583.10; the bulls \$677. The cows ranged from \$200 up to \$1,700—three selling for more than \$1,000 each. The bulls ranged from \$170 (a calf of 4 mos.) to \$3,000.

A sale of imported Jerseys and Guernseys was made at Philadelphia, 31st Oct., by E. P. P. Fowler; prices ranged for Jersey heifers from \$160 to \$335—a bull 18 mos. old sold for \$150. The Guernsey heifers sold at from \$65 to \$235—the latter with cow calf.

At same sale, a Devon bull sold for \$150, two Hampshire Down ram lambs at \$45 and \$30, and a yearling ewe for \$67.50; two young Cotswold rams for \$60, and two ewe lambs for \$70. Dark Brahma Fowls at \$7 to \$11 per trio. Buff Cochins at \$16 per trio; Golden pencilled Hamburgs \$15 a trio—beside pony mares, carrier pigeons and dogs.

Mr. Robert Moore, of Baltimore, has sold to Col. D. McDaniel, of Princeton, N. J., the Jersey heifer Inez, which took the first prize in Channel Island cattle, not registered, at the late Md. State Show.

ROAD CONVENTION .- The meeting of the Road Convention was called, unluckily, for an evening in Nov. which it so happened was also selected for a great torchlight procession and mass meeting in this city, on the eve of the Presidential election-consequently but a very few persons gave it their attendance. The few gentlemen present had an informal consultation. Mr. Wm. Webster acted as Secretary; Mr. D. Lawrence read the report of the Committee, and accompanied it with some appropriate remarks, as did also Judge Mason, of Annapolis, upon the subject of roads and other matters of interest to farmers-after which, on motion of Dr. Merryman, the report of the Committee was laid on the table, and the convention adjourned to the first Tuesday in December at 12 o'clock noon, at Raine's building in Baltimore. It is to be hoped, that if the farmers of Maryland have any desire to see so important a matter as this brought prominently before the people of the State, some demonstration will be made towards the object at the adjourned meeting.

### Ayrshire Cattle.

We have numerous applications to purchase and ship heifers and cows of this breed—one which seems to be coming into high favor at the South—and we regret to be compelled to say that we have been unable to fill orders for them. Maryland at one time had many fine herds of this desirable breed, but with one or two exceptions, they have disappeared, and we are at a loss to find Ayrshires of a quality suited to supply our correspondents. There are many fine herds to the North of us, but the difficulties and expenses of transportation

put them in most cases beyond the reach of intending purchasers.

If there are any gentlemen in Maryland or Virginia—or elsewhere conveniently situated for shipments South—who have for sale Ayrshires of undoubted breeding and quality, we should take it as a favor to be apprised by them of the fact.

INTERNATIONAL EXHIBITION.-We have received from the U.S. Centennial Commission, of which General Joseph R. Hawley is President, an address to the people of the United States, calling upon them to raise a fund of ten millions of dollars for the purpose of making our Grand Centennial Exposition, to be held in Philadelphia in 1876, such a success as the pride and patriotism of every true American demands. The formation of societies in each State and Territory for the promotion of this object is also recommended. We may have opportunities hereafter to publish the address, or such portions of it as to give a fuller view of the nature of the contemplated exhibition, which will be held in 1876, at which time our country will have completed its hundredth year since the Declaration of Independence was issued. John W. Davis, Esq., is the Commissioner for Maryland. The late Wm. Prescott Smith was appointed the other Commissioner for Maryland; his death caused a vacancy which has been filled by President Grant, at the recommendation of Gov. Whyte, by James T. Earle, Esq., of Queen Anne's county.

THE HORSE DISEASE.-This singular and terrible disease is extending its devastations throughout the whole land; it commenced in Canada, and soon with rapid strides made its appearance in our States adjacent thereto, and passing through all the intermediate localities, is extending its course West and South. The papers of the whole country are filled with accounts of its ravages, and the vast amount of injury which is being done by it, not only in the loss of valuable animals, but the great interference with all business which it has caused in every department of life. In all the cities the street cars have been more or less interfered with, and in many cases, as in Baltimore, every vehicle was taken off the lines of travel for a week or more. Comparing the number of horses which have been affected, the deaths have been moderate; this doubtless has been caused by the care which the owners have found it necessary to extend to the poor sufferers, to save them from the consequences of an undue exposure in their debilitated state. It is believed that but few which have been apparently restored, and again stricken with the disease, have recovered from the second attack. Innumerable remedies have been prescribed and published—perhaps among the most reliable is one recommended by the Society for the Prevention of Cruelty to Animals.

Mr. Dobbin has practiced the following course, with much success, with the horses in his extensive livery stables in Baltimore, but some persons deem the steaming process dan-

gerous in unskillful hands:-

"As soon as he found his horses affected with the disease, he steamed them by scalding a bushel of bran or oats in a bag, and whilst hot forcing the horse's head into it, up to the ears, when possible to do so. After this application, lasting some ten or fifteen minutes, it was found that the nostrils were cleared of all accumulations of matter, and that the disease The throat and legs of the had been broken. horses, from the fetlock to the knee, were also rubbed with a mixture of mustard and coal oil about the thickness of gruel, after which the legs were wrapped with red flannel up to the knee. In extreme cases the rubbing of the legs was repeated several times. horses being in the condition known as "off their feed," Mr. Dobbin gave them out meal gruel, which proved very strengthening. He also gave them a thin mash made of apples, carrots and other vegetables, chopped very fine, under which they soon recovered their regular appetite and speedily returned to health."

It is being found that in many cases the disease is followed with indications of dropsy, after the animal appeared to have recovered. If great care is not taken, the latter case will be worse than the first, as the dropsy will be a lingering disease.

In addition to the modes of treatment already given, we annex the following prescriptions from Dr. Elliott, of Canada, a veterinarian who is said to have been the most successful of any other in the management of the disease:

Prescription No. 1.—Linseed oil, 1½ oz.; turpentine, 1½ oz.; liquor ammonia fort. 1 oz. Mix all together in a four-ounce bottle and apply to the throat if you think necessary to

Prescription No. 2.—Nitrate potash, 1½ oz.; tartarized antimony, 1½ oz.; digitalis. ½ oz. Pulverize all together and make twelve powders; give one morning and night. P. S.—If they are not very bad, you might omit the last ingredient, namely, digitalis."

MR. L. E. RICE, a correspondent whose paper on another page on the Jersey Herd Register contains some very pungent sentences, is a gentleman whose enterprise and skill as a breeder qualify him to speak with authority upon all subjects connected with stock raising, as our readers have had the opportunity of knowing from the able contributions he has from time to time made to our columns. We recently had a hurried opportunity "between trains" of taking a look at his fine herds of Jerseys and Ayrshires, although under such unfavorable circumstances of haste and the incessant driving of a heavy and penetrating rain that the inspection was not a very satisfactory one, and especially unpropitious for taking any notes, as we could have wished to do. Mr. Rice is an enthusiastic believer, for their particular uses, in both of the races named. and presents very handsome and useful representatives of each. We do not think we have ever seen in this country finer Ayrshires than those in this herd; the bull Captain Nye being a substantial, solid animal, almost equalling in bulk and form a good Short Horn, while Fairy Queen, several May Queens, Juliet, Daisy and Polly, are all excellent specimens of this splendid race-one which we notice, with much regret, is being in a great measure neglected in Maryland and the States to the South of us.

The Jersey herd, about equal in numbers to the Ayrshires-each containing about fifty head-embraces some very superior and some very handsome cows, some of the pedigrees going back to the best butter cows whose records are publicly known, the famous Hungerford cow, which made 19 lbs. of butter a week, being represented we believe by direct descendants. A young bull, Oliver, struck our fancy very much, and has in him the material we think for the making of a magnificent animal, so far as appearance goesand as Mr. Rice avowedly breeds for merit rather than appearance, it is probable his stock will have the advantage of both those qualities. This gentleman has also a few choice Guernseys, a breed he seemed to regard with very favorable eyes.

A NATIONAL CONVENTION OF THE SHORT-HORN BREEDERS of the U. S. and Canada, was held at Indianapolis, Indiana, on 27th Nov. We will give an account of the proceedings in our next.

### The Virginia State Agricultural Fair.

The Virginia State Society held its show at Richmond, from October 30th to November 2d, the exhibition being generally a good one and well attended. Quite a number of the patrons and friends of the American Farmer were exhibitors, and seem to have taken a large share of the premiums. Some of our Marylanders were also on hand, among them Mr. W. D. Brackenridge, with an assortment of fruit trees, embracing 144 varieties. Mr. L. Mongar, of Baltimore county, exhibited Jersey cattle, Bronze Turkeys, Rouen and Muscovy Ducks, and Cochin and Bantam Fowls, and Mr. J. E. Phillips had quite a number of his fine Jerseys there, and as will be seen, brought home a number of ribbons.

Our old friend, A. P. Rowe, of Fredericksburg, entered some Alderneys and Ayrshires, Chester and Suffolk pigs, and an imported Shropshire ram, and his son showed some very fine fowls. Dr. Wooldridge, whose advertisement will have been noticed in the Farmer, exhibited an Essex boar, Cochin fowls, and Aylesbury ducks. Major S. S. Bradford, of Culpepper, made a large display of Devons, Merino and grade sheep. Mr. T. S. Cooper, of Coopersburg, Pa., entered some superior Short Horns and Cotswolds. Mr. James Newman also showed Cotswolds, Mr. R. B. Haxall a Short Horn bull and some grade cows, and Mr. John T. Cowan a number of excellent Short Horns. Mr. G. F. B. Leighton, of Norfolk, made a handsome display of the fine pears for which he is so well known.

We note some of the most important of the awards: In thorough bred horses Major T. W. Doswell took the ribbon for the best four year old stallion, on King Lear, and three other prizes for a yearling colt, and fillies of one and three years. Mr. Wm. Roane Ruffin was awarded the premium on best entire colt three years old for Brennan; R. H. Fife for best do., two years old, for Robin Adair. Best brood mare, four years old, Col. J. L. Carrington for Ada Washington. Horses for general utility. Best stallion four years old, S. S. Edwards, for Archie Morgan. Best entire colt three years old, J. H. Timberlake, for Revenue. Do. two years old, N. B. Anderson for Lightfoot. Best brood mare, Col. J. L. Carrington for Augusta. Best three year old filly Dr. M. M. Walker for Julia Jackson; best one year old filly J. A. Lynham.

Roadsters for quick draft. Best stallion four years old, James Walker for Hambletonian. Best entire colt, three years old, W. B. Mitchell for Pantier. Best do. two years old, A. D. Anderson. Best brood mare Mr. Babcock for Emma. Best filly three years old Dr. M. M. Walker for Julia Jackson. Best yearling filly J. A. Lynham for Katie.

In Short Horns, T. S. Cooper, of Pa., took 1st and 2nd premiums on aged bulls. First premium on bull 2 and under 3 years, Roller & Frank; 2nd best do. R. B. Haxall. Best yearling bull, S. S. Bradford. All the prizes for cows and heifers went to Mr. J. T. Cowan.

Alderneys. Best bull 3 years old, F. T. Lee, for Rolla; 2nd best J. E. Phillips, for Ivanhoe; best bull 2 years old, R. Burgess, for Red Cloud; 2nd best, L. Mungar, for Orlando; best yearling bull, L. Mungar, for Jim; 2nd best, A. P. Rowe, for Hannibal. Best cow, F. L. Lee, for Gazelle; 2nd best, J. E. Phillips, for Pride of Oakland. Best and 2nd best heifers 2 years old, both to Mr. Phillips; best and 2nd best yearling heifers and best heifer calf all to J. F. Lee, of Campbell county. In Devons Major Bradford swept all the premiums. The herd premiums both went to Mr. J. T. Cowan, and all the sweepstakes for cattle to T. S. Cooper, of Pa.

In Merino sheep Major Bradford took all the prizes offered, as also those for fine wool grades. In middle wools W. B. Byers took the prize on best pen of ewes, and A. P. Rowe that for imported Shropshire ram. In long wools W. B. Byers took the prize for best ram, and T. S. Cooper, of Pa., all the others.

We regret very much that the Short Horn herd of our friends, Messrs. J. N. and J. D. Bethune, successful and spirited breeders, of Fauquier, Va. failed to reach the show grounds in time to compete for the prizes, all of which were awarded before they arrived.

ELECTION OF OFFICERS VIRGINIA STATE AGRICULTURAL SOCIETY.—At the annual meeting of this society held during its late fair the following officers were elected to serve for the ensuing year:

President, George W. H. F. Lee, Kg. Wm. Vice Presidents, John T. Cowan, Montgomery; Col. W. C. Knight, Richmond; A. H. Drewry, Charles city; R. B. Haxall, Orange; Dr. Walker, Goochland; Randolph Harrison, Cumberland; W. A. Burke, Augusta; J. D. H. Roes, Rockbridge. Executive Committee,

Col. Carter, King William; S. W. Ficklin, Albemarle; R. W. N. Noland, Fauquier; J. R. Jones, Brunswick; J. D. Rogers, King George; S. S. Bradford, Culpeper; J. Hoge Tyler, Pulaski; Dr. S. P. Moore, Richmond; A. J. Bondurant, Nelson. Secretary, E. G. Leigh.

### Ploughing Match.

In our October No. we called attention to a Ploughing Match, which was announced to take place on the 20th of that month, under the auspices of that public spirited Agricultural Club, the "Gunpowder," of Baltimore co. We attended, by invitation, the trial, at the farm of the venerable John Price, near Philopolis, and was gratified to find on the ground so many manufacturers and venders of ploughs; circumstances prevented our remaining on the ground to the end of the trial, which really did not commence until after dinner, which was hospitably provided by the members of the club in full abundance to their friends and visitors. Our friend, the very efficient Secretary of the Club, Mr. Thomas Gorsuch, however, furnished us with some of the items pertaining to the exhibition, which the crowded state of our pages prevented our using in our Nov. number, as we desired to We would add, that the members of the Club considered the trial a success; notwithstanding the whole arrangements necessary for such an affair, were to be made by men unaccustomed to such work, and consequently the delays and whatever want of system was manifested on the occasion, were unavoidable; and if, as we hope will be the case, another trial of a similar character shall take place, the experience attained at this will doubtless prove eminently advantageous. We give the following from the pen of the Secretary:

The farming community was well represented, not only from the neighborhood but also from a distance. Indeed the attendance and interest manifested quite exceeded expectations and called forth the surprise and gratification of the exhibitors. Of the latter the "Taylor Manufacturing Co.," of Westminster, Carroll co., Md., made the most extensive display. Their implements are gotten up with a neatness and finish which should constrain "Mother Earth" to handle them gently in her soiling contact. The two and three-horse ploughs of this make found general favor for their draft and fine work. The three-horse is provided with wrought shear and point, awakening memories of the old "Chenowith," so

long without a peer, and of which the most venerable farmers will speak with fondness and respect.

The "Woodcock" plough, of various sizes, was also well represented by Mr. Evan Davis, of Davisville, Balt. co., Md., and on the field lost none of its long tried and well contested

merits.

A. G. Mott, of Balt. city, so well known to the farmers of our county, exhibited among others, a revolving-beam iron centre hill-side plough, which attracted a large share of attention and drew crowds after it. He exhibited, also, an Empire letter "C" plough, for three horses. Mr. M. also calls this plough the "Railroad King's Favorite," it being J. W. Garrett's pet, and well it may be, for it not only does its work superbly, but will run for long stretches of itself, the ploughman composedly folding his arms and complacently regarding the huge rolling furrow.

Griffith, Baker & Bryan, of Baltimore, exhibited two of those fine Pittsburg iron-frame, steel mold-board and shear ploughs, which did their work admirably. Their excellence is, however, generally admitted. This firm exhibited farther a "Dexter Washing Machine"

and a corn-sheller.

John A. Wierman, of New Oxford, Adams county, Pa., entered a plough, which, like a singed cat, was so much better than it looked to be that after the trial a number were sold on the spot.

Sinclair & Co., of Balt., Wagner & Mathews, of Westminster, and Shelley of Littlestown,

Pa., also made entries.

The Report of the Committee will be published when received. The following gentlemen composed the Committee of Arrangement for the trial, and deserve high credit for their assiduous efforts in the discharge of the duties assigned them: Messrs. John B. Matthews, Dickinson Gorsuch, Jos. Bosley, Sam'l M. Price and Abra. Scott.

### Neat Calculations in Farming.

A correspondent of the Atlanta Plantation. makes mention of a fact worthy of note-that the most successful farmers were first engaged in mercantile pursuits, and he instances the case of Mr. Mechi, of England, and Mr. D. Dickson, of Georgia, and the author of "Ten Acres Enough," and we might add Mr. Jas. Gowen, of Philadelphia. A merchant is all his life time accustomed to making sentures, and close calculation as well as foresight is necessarily engrafted into his composition-sometimes it is true, he makes mistakes and suffers loss, most frequently from his necessary connections with others-but when he undertakes farming as a business, and applies his whole time and attention to it, he is very apt to

make a first rate and successful manager, if he is an intelligent man-he is not afraid to take a risk, when he has examined a matter presented to his attention, which his investigating mind deems feasible. We have in our time known many such, who although in their early farming career have been subject to the ridicule of those among whom they may have located, for having departed from the old beaten task they have followed which had been travelled by their forefathers, yet in time the merchant farmers have proved to their neighbors that agriculture was not the single profession which was to stand still as it had been practiced from the earliest ages. whilst every other art was making such giant strides to a higher perfection. One great quality enjoyed by the man who has been accustomed to the counting room of a merchant, is system, to which is added promptness; characteristics too little understood or practiced by the mass of farmers, and hence many of the drawbacks to which they are subjected.

The correspondent alluded to, (Mr. F. Fontaine,) gives the experience of Mr. Dickson in his operations, which corroborate what we have said above:

"In order to insure a large gross yield, Mr. Dickson based his calculations first on the character of the plant adapted to his soil, which promised to yield the largest income. After deciding upon cotton, he took one acre as his basis in order to make his total estimates. Reflecting that cotton was a sunplant, he planted his rows north and south. Ascertaining the food necessary to sustain the growing plant, he purchased and applied it. To cheapen its cost, he became a manufac-turer of Dickson's Compound. Knowing Knowing from experiment that the cotton plant, like all plants, only required a given amount of food to produce a given result, he forecasted his cotton crop with almost meteorological precision. Finally he estimated the number of rows to the acre, and fixed a standard of the number of pounds of plant food to the row, which has well nigh become universal wherever Dickson's Compound is used. Of this fertilizer, were sold the first year - tons, in tons. And David Dickson never lost sight of the net profits per acre."

Mr. Dickson informed one of the editors of the Farmer, whilst on a visit to his residence in Georgia, before the war, that when he retired from merchandising he had some \$25,000 in "long paper," with which he commenced farming operations, having in the sale of large tracts of land belonging to an estate in which he was interested, taken all that would not sell for more than a dollar an acre. As stated

above, he went systematically to work in renovating these lands, and the senior editor of this paper supplied him with thousands and tens of thousands of dollars of manures, or the materials for making fertilizers—and at the time alluded to, he undoubtedly held the position of one of the millionaires of the South. The estimation in which he held our services as a journalist is evidenced by the following extract from a letter received from him and published at that time:

"It is a great pity that every planter in Georgia did not take your paper, for you have saved the wheat growers in the United States millions of dollars in the last fifteen years; and the consumers of guano owe but little less;" and on another occasion the same distinguished gentleman, speaking of our Journal, remarked: "If the Georgia planters understood their interests they would double the price of your paper and have it come once a week, and take thirty or forty thousand copies."

We contemplated making the Farmer a weekly, but we have come to the conclusion that in the present unsettled state of the country in which our journal mainly circulates, the change had better be deferred, for we find that one of the best agricultural journals of the South, the "Plantation," published in Mr. Dickson's own State, which has attempted the weekly edition, has just concluded to adopt the monthly form.

In connexion with his remarks about merchant farmers, some facts about the cultivation of the grasses, made by Mr. Fontaine, are worthy of note. Next to Indian corn, the hay crop is estimated to be of a greater money value than any other, in the Agricultural Report for 1871-and the N. Y. Agricultural Society's report claims that the grass fields of that State produce on an average 96 tons of hay to every 100 acres. In the United States there were 19,009,052 acres in grass in 1871. yielding 22,239,400 tons, estimated to be worth \$331,717,035. In New England, the hay crop is largely shipped to the South, to supply the cotton planters with what should be raised at home. Mr. Fontaine, in view of these facts, remarks:

"Grass grows while we sleep; and clover takes from the atmosphere nitrogen and gives it to our soils. The greater part of the net profit in clover-raising is the turning under the second crop, containing so much nitrogen. The greatest advantage is, that in our climate, clover properly managed is a perennial plant." He adds:

"The net profits, per acre, in oats, as de-

monstrated by Mr. Wm. H. Young, another prominent mercantile capitalist, who raised on ten acres of "this piney-woods land" 556 bushels clean, fanned oats, and one ton of crab-grass hay per acre, by applying to each acre 50 bushels of cotton seed and 100 pounds of Peruvian guano, at a cost, per acre, of \$14.50, or \$145.00 for the ten acres, proves that it is a cheaper crop than corn.

Mr. Young's table of costs and receipts:

Mr. Young's table of costs and receipts:
Dr. (r. \$445.00, plus the labor 555 bu at \$1.00.\$556 00

Labor 100.00 (We will esti-) 10t'ns hiy at \$40 400 00
mate it at \$10 per acre. \$956.00

Net profit from ten acres in oats in 1872 .....\$711 00 "These merchant-farmers look keenly to the net profits. David Dickson was never afraid of sending one dollar after two. And this is the lesson for us to learn: Invest observation and 'enterprise' as well as capital."

#### Books Received.

From Messrs. Cushings & Builey, of Baltimore—"THE SOUTHERN APPLE AND PEACH CULTURIST, adapted to the soil and climate of Md., Va., the Carolinas, Ga., and farther Md., Va., the Carolinas, Ga., and larther South, including portions of the West and W. Va.," by James Fitz, Keswick, Va., Practical Horticulturist. Edited by J. W. Fitz, Prof. West Tenn. Female College. Published by J. W. Randolph & English, Richmond, Va. pp. 336; price \$2.50. This volume, containing full instructions in all the operations of fruit growing, with descriptive lists of varieties of orchard fruits most desirable for the table, the kitchen, and the market, makes its appearance when such a work is most needed, and we hope its well-digested contents and timely publication will receive the due encouragement a work intended for Southern latitudes so much deserves. From the attention now being given all through the States bordering on the Southern Atlantic Seaboard, to the growing of fruits, in conjunction with the general diversification of crops, in the place of the old staple productions, a work like this one, the result of the experience and observations of a practical man ought to be warmly received, as we have no doubt this one will be. The author seems to have drawn upon all reliable sources accessible for facts illustrative of his subjects under discussion, and the field he occupies is a wide and varied one. It is probable when we find our pages less crowded that we can make some extracts from Mr. Fitz's work. In the meantime, we commend it to all our readers who are interested in peach or apple culture-and we will be pleased to include it in our list of pre-miums for the forthcoming volume of the American Farmer.

From the publishers, Messrs. Porter & Coales, of Philadelphia, "The Jersey, Aldernary Cow, their history and management." Edited by Willis P. Hazard, pp. 142. Price \$1.50. This beautiful little book is mainly a compilation of the

most striking and valuable facts from the writings on the Channel Islands cattle of E. P. P. Fowler, Col. Geo. E. Waring, Jr., Chas. L. Sharpless, Prof. Gamgee, Dr. Twaddell, L. Sharpless, Prof. Gamgee, Dr. Twaddell, and others, who have discussed the merits and peculiarities of these breeds, with annotations and chapters by Mr. Hazard. There is nothing particularly new in the work, but the editor has brought together material not easily accessible to the general reader, and has made his compend not only interesting but valuable to those who are just engaging or are already engaged in breeding these cat-tle. To our friends in the South who are beginning to buy Jerseys, and who find them well suited to their climate and other circumstances, we recommend this little book as one giving a good deal of very useful and very seasonable information. The work contains portraits of several celebrated Jerseys: the system of Guenon for establishing the value of cows as milkers by the formation of the escutcheon is explained and illustrated by numerous drawings, and the various points connected with the choosing, management and breeding of this stock to the most profit, are clearly discussed. In typography, paper and binding the book is a little gem of artistic workmanship. It can be had at our office, and in another column it will be seen we make

workmanship. It can be had at our office, and in another column it will be seen we make a special offer of it as a premium.

From the author, Baltimore—"On the Management of the Dairy, written for the use of Dairymen, by C. F. Raddatz, Professor of German and History, Baltimore City College," pp. 45. This unpretentions little work, neatly printed at the Sun office in this city, contains a large amount of very suggestive and very good material, to the writing of which the author remarks, he has been moved

by the frequent complaint of the difficulty of obtaining good butter for keeping, and by the prevailing want of system with so many American farmers in the management of the dairy. Mr. Raddatz's father was a North German farmer in one of the most fertile districts in the Baltic, noted for his improvements in dairy management, and from conversations with him and from his own observations, the author has obtained the knowledge which he now seeks to impart to others in the hope of improving the butter which is now brought to our markets. He says he is aware that every farmer is not able to make his establishment complete, but he only asks that the method he suggests be given a trial. feeding of the cows both in stalls and in pastures, their watering and milking, the care and churning of the milk and cream, the working and packing of the butter, the various utensils and buildings, are all carefully and minutely described, and a reading of the pamphlet can scarcely fail in any case to prove of more profit than many times the cost of the We will send a copy of this work, postage paid, to any subscriber of the Farmer who will renew his own subscription and for-

ward a new one for 1873, at the regular rate of \$1.50 each a year.

### Our Exchanges.

THE RURAL SUN is a new worker in the field, a weekly, the publication of which has just been commenced at Nashville, Tenn., by the Rural Sun Publishing Co., at \$2.50 a year. J. B. Killebrew is the editor, assisted by Dr. J. M. Safford and Prof. Hunter Nicholson. In appearance the paper is neat and attractive; in matter, so excellent and practical, that its success seems already assured. We cordially welcome it, and hope it long may prosperously shine.

THE PLANTATION, published at Atlanta, Ga., has been changed from a weekly to a monthly. Subscription \$1.50 a year. The Rev. C. W. Howard and Dr. Daniel Lee continue to write for it, and will doubtless maintain it in its distinguished position for excellence and practical worth, to achieve which, they have both contributed so largely. Lee, we find, has also charge of the Agricultural Department of the Nashville Union and

American.

THE RURAL ALABAMIAN, that most excellent monthly, published at Mobile, gains an able hand in Dr. H. A. Swasey, late of the Rural Southland, who becomes associated with C. C. Langdon, in the editorial manage-

ment.

THE SCIENTIFIC AMERICAN, published by Munn & Co., New York, at \$3 a year, has long been a welcome visitor to our table. is simply indispensable to every one who wishes to keep up with the times in science and art, practical mechanics, applied chemistry, improved manufactures, new inventions, patent matters, or general information.

THE OVERLAND MONTHLY, San Francisco, Cal., John H. Carmany & Co., \$4 a year. This magazine, similar to the Atlantic in general appearance, comes each month laden with a feast of good things, which show the ripe fruits of science and literature on that far off coast, all of them bearing too the peculiar and

piquant flavor of the Pacific.

### The Chuckatuck (Va.) Farmers' Club

Met at the farm of Mr. Rodgers Nelms, Nov. 2d and elected C. Hall chairman. ceedings of last meeting were then read by the secretary and adopted; after which, Dr. Briggs read a review of the books "How Crops Grow" and "Farm Implements," (which he had drawn from the Club library the last month,) which was received with thanksthis was in accordance with the rules of the Club, which requires a member, when he returns a book, to make a report on the same, calling attention to matters in it worthy of special attention.

The Club then proceeded to the discussion of the subject for the day, "Farm Implements and Machinery," the Chair calling on different members. Dr. Briggs stated he had tried a good many ploughs—Peekskill, No. 19 and 19½, Watt's M and N and O and 2, Starke's

Dixie, No. 2 and 11, &c., and thinks the nature of our soil such as not to require heavy ploughs; the Watt M and N and Dixie, No. 11 preferred, especially the latter; has both of these ploughs at work, and has noticed that as soon as the man who runs the Dixie leaves, the other leaves the M and N and takes the No. 11 Dixie, and both say it is the best they ever used, and the same with one horse Dixie X and I. For surface cultivation would recommend the Dixon Sweep as calculated to supersede the bull tongue, &c., and also considers the Murfree subsoil very worthy. For one-horse harrow prefers the A straight tooth and the twenty straight square teeth folding harrow for two horses; thinks the movablehoe cultivator a fine implement, both as cultivator and wire-grass devil; has this year used a W. A. Wood mower, which has given eminent satisfaction.

Mr. Jones prefers the Dixie ploughs, both double and single; uses no other; uses the same harrows and cultivators as Dr. B.; pre-

fers steel hoe.

Mr. Kitchens likes the work of A and B Watt plough, but it is heavy for one horse and light for two; has never tried the Dixie; his neighbors like them.

Mr. Rodgers has but little to say; but that shall be in favor of the Dixie, the best plough

he has ever used.

Mr. Cowling has been using ploughs for forty years, and finds the Dixie, from practical use, to be pre-eminent; has used it in corn, cotton, peanuts and potatoes, and wants nothing better; has a "Kirby" mower and reaper, but it is not worth having; has the past year worked the "W. A. Wood" mower, and would recommend it for doing fine work.

Mr. M. Rodgers would recommend the Dixie ploughs, and likes the straight, square

tooth folding harrow

Mr. Oliver has no Dixie, but does not think the X cuts enough width of furrow; the iron beam Peekskill 184 cuts more, and therefore likes it on light lands; has never used the No. 1 Dixie; in fact would recommend the X on rough land; agree with others in cultivators.

Mr. Rodgers, Sr., agrees with others in fa-

vor of Dixie plough and harrows.

Mr. Nelms the same; would recommend as an improvement to have handles to harrows, so that they may track close and also for

cleaning teeth.

Mr. Walravin agrees with Mr. N.; wants handles to harrow, (twenty straight square teeth;) has never tried the Dixie plough; for himself wants no better than the Watt ploughs, but his hands will twist them out of running order; of three nearly new that he has now, not one is fit to use; has a Kirby; it does good work, (the only one that does out of 8 or 10 in the neighborhood,) but is too heavy for two horses.

Mr. Hall finds the Dixie excellent for all work; small mould board fine for working peanuts and the large point for digging them. Mr. H. places the Dixie before any plough he ever tried; prefers folding harrow, with more

numerous small, round teeth, and would recommend as indispensable the spring tooth sulkey horse rake, and also recommend the "Clipper" mower and Cahoon's broadcast seed sower.

The Club would here state as a general principle that they do not think the harrow is used enough (in this section) for proper

benefit of land or crop.

Subject for next meetings, "The Most Profitable Crops?" all things considered. The Club then partook of the fine repast provided by the hosts and then adjourned to meet 1st Saturday in December.

H....., Sec'y C. F. Club. Nansemond Co., Va.

[Surprised at the report made at the above meeting, of the Kirby reaper, of which we have always thought highly, and which is usually regarded as being a first-class machine, we referred the subject to Mr. J. C. Durborow, the agent in this city for the Kirby. He informs us that the machines in the section of country represented by the members of the Chuckatuck Club, were all sold there before he assumed the agency here, and were probably ordered from, and put up by local agents who were not efficient in putting them together. He sends us also the statement given below. It will be noticed that Mr. Upshur, who writes eulogistically of the Kirby, resides at Chuckatuck, and is, we believe, a member of the Club there .- Ed. A. F.]

In reply to the statement given above of the Kirby machines, I will merely state the fact that the Kirby combined machines received the highest prize (a gold medal) at the Grand Field Trial of Reapers and Mowers held at Owatonna, Minnesota, July 26 to Aug. 3,1871. From the report it appears that there were 35 different points upon which each machine was thoroughly examined and considered; after determining these 35 questions, the committee proceeded to decide "which of the machines was best adapted to the use of farmers, by having the greatest number of

merits and fewest defects.

The report gives full and correct tables of the draft of all the machines, which is really, next to quality of work, the most important point which was considered by the committee in their examinations. The draft of the Burdick (Independent Reaper) was the lightest of any machine in that class, and the Kirby (as a Self-Rake Reaper) was the lightest draft in the class of combined machines, both Reaping and Mowing; cutting as a mower, eight inches wider swath than the next lightest. The time for changing the Kirby Self-Rake Reaper to a Mower, in presence of the Committee, was but four minutes. Near the bottom of page 8 of the "Official Report," is given the summing up for "Independent Reapers."

Then follows the summing up for combined

machines, and with "Perfection" denoted by 100, the list is headed by the "Kirby 92½; the next in order of merit was 88½, showing the Kirby 4½ points ahead. When it is considered that the last machine on the list is rated "86½" (the lowest one.) and that the next best is only two points above it, it will be apparent how close the calculation was made and how high the Kirby stood above its competitors, all of which were first-class machines.

The following extract from a letter of C. L. Upshur, Esq., of *Chuckatuck*, dated June 5, 1872, shows his opinion of the Kirby. \* \*

"The machine works admirably. I have just had about 10 acres cut to-day, besides losing some time in transferring to a distant field."

I could furnish thousands of testimonials from those who have used the Kirby as to its merits, but deem it unnecessary and leave it to the practical farmers of the country to decide whether the Kirby is a "good-for-nothing machine;" and would further state that D. M. Osborne & Co., or their authorized agents, are willing at any time to prove by a fair contest in the field that the Kirby is all that is represented. J. C. Durborow, Gen. Agt,

No. 64 Sharp st. Balto.

A Cranberry Fortuse.—A merchant of Chicago was induced by two friends to invest with them in a land speculation at some distance off—the purchase was made, and the parties divided the land in three parts, keeping the two best locations, as they supposed, for themselves, and appropriating the other third to the absent partner; for some years he continued to pay taxes for it, without ever having seen it; but finally becoming ruined in trade, he bethought himself to visit his distant property, when, to add to his troubles, he found that his friends had palmed upon him an apparently worthless swamp. The N. Y. Independent thus tells the balance of the story:—

"Sighing just a little at the duplicity of his friends, he wandered over the swamp he almost disdained to call his own, and splashed through its mud and water in desperate hopelessness. Poverty and want stared him in the face, when lo! something else stared him in the face too. He found something upon his land. What was it? It was not California gold nor South Africa diamonds; neither was it oil, iron, or coal. It was wild cranberries.
"Presto, change!" Now mark the result. That land is worth \$800 per acre and he is worth half a million dollars. He was a shrewd man, with an eye to business; and he saw at once a fortune in those cranberries, and went to work to realize it by cultivation and systematic labor, and he has a regularly trained brigade of children and hands to pick and prepare the cranberries for market, for which he realizes as high as \$24 per barrel, while the men who intended to play a joke on him now mourn over their own unvaluable land and sigh for the fortune their joking lost them."

### Awards on Implements at Maryland State Fair, 1872.

IMPLEMENTS AND MACHINES.

Best one-horse plow, dip. and \$4, A. G. Mott; best two-horse plow, dip. and \$6, A. G. Mott; best three-horse plow, dip. and \$6, Norris & Son; best plow for rough and new land, \$4, Sinclair & Co; best hillside plow, \$5, Griffith, Baker & Bryan; best gang plow, \$4, Whitman & Sons; best sulky plow, \$5, Sin-clair & Co.; best hand plow, \$2, Griffith, Baker & Bryan; best potato plow, \$5, Whitman & Sons; best harrow, \$5, Sinclair & Co.; best tobacco cultivator, \$3, Norris & Son; best horse hoe, \$3, Sinclair & Co.; best vegetable hand cultivator, \$2, Whitman & Sons; best field roller, \$8, Sinclair & Co.; best grain drill, \$8, W. L. Buckingham; best corn planter for horse, \$5, J. Wambaugh; best corn planter for hand, \$2, J. Wambaugh; best fertilizer spreader, \$5, Sinclair & Co.; best machine to thresh, &c., for from six to ten horses, at one operation, \$30, Norris & Son; best machine for from two to six horses, \$20, A. G. Mott: best threshing machine without separator, \$10, E. Whitman & Sons; best straw carrier attachment, \$5, E. Whitman & Sons; best sweep horse-power, six to ten horses, \$15, J. Thomas; best sweep horse power, four to six horses, \$10, J. Wambaugh; best two-horse railway power, \$10, E. Whitman & Sons; best mowing machine, two horses, \$15, Norris & Son, for W. A. Woods'; best mowing machine, hand power, for lawns, \$5, Griffith, Baker & Bryan; best combined reaping and mowing machine, \$10, J. Thomas, for the Buckeye; best reaping and mowing machine, with dropper attachment, \$20, A G. Mott, for the Ætna; best reaping and mowing machine, with self-raking attachment, \$20, Lee & Brother, for the Champion; best hay tedder, \$10, Griffith, Baker & Bryan; sulky horse-rake, \$5, Griffith, Baker & Bryan; best hay press, hand power, \$8, Whitman & Sons; best large cider and wine press, \$8, Sinclair & Co.; best small cider and wine press, \$5, Whitman & Sons; best smut machine, \$3, J. Thomas; best clover huller and cleaner, \$5, Griffith, Baker & Bryan; best stump puller, \$5, Grifflth, Baker & Bryan; best bee hive, \$4, C. W. Banks; best platform best bee five, \$4, C. W. Baias; best parton scales, \$4, Spear Bros,; best ox yoke and bows, \$2, A. G. Mott; best self-opening and shutting gate, \$10, R. R. Carman; best machine for grinding reaper knives, \$3, J. Thomas; best road scraper, \$2, A. G. Mott; best grain fan and separator, first premium, E. Whitman & Son, \$10; cockle machine, first premium, E. Whitman & Son, \$5; horse-power corn sheller, first premium, R. Sinclair & Co., \$5; double spout corn sheller, first premium, R. Sinclair & Co., \$4; single spout corn sheller, first premium, R. Sinclair & Co., \$3; hay, straw and stalk cutter, first premium, R. Sinclair & Co.; horse power, \$8—first premium, do., hand power, —; horse hay fork, first premium, Norris & Son, \$5; grain cradles, first premium, E. Whitman & Son,

\$3; American scythes, first premium, R. Sinclair & Co., \$3; hand hay rakes, first premium, E. Whitman & Son, \$3; garden rakes, first premium, do., \$2; pitch forks, first premium, do., \$2; digging forks, first premium, do., \$2, long handle shovels, first premium, R. Sinclair & Co., \$2; Briar Scythe, first premium, do., \$1.

The following Discretionary Premiums

were awarded:

Wm. E. Turner & Co., Richmond, Virginia, steam engine and log wagon combined, di-ploma and \$20; Wm. R. Fowler, Anne Arundel county, Maryland, fly driver, \$5; Cotter Bride, Baltimore, rustic work for gardens, diploma and certificate of merit. James Armstrong, Baltimore, champion fire-place heater, piploma and award of merit. Wagoner & Matthews, Westminster, Maryland, onehorse sweep mower, diploma; also, hominy mill, \$10. B. G. Fitzhugh, Frederick, Maryland, cart loader and dumping cart, diploma and certificate of merit. John Richardson, Harper's Ferry, Virginia, boring machine, \$10. J. C. Durborow, Baltimore, self rake attachment to a mower, for Baltimore rake to the Kirby, diploma. F. T. McWhorter, Dela-ware, sacking and weighing attachment to ware, sacking and weighing attachment to threshing machine, diploma and \$10. J. Brown & Co., Peekskill, New York, harrow, diploma. Thomas Basshor & Co., Baltimore, steam pump, diploma and \$10. Morrison & Co., Baltimore, pump for hot water on acids, diploma and \$10. Chas. Schultz, Baltimore, circular saw, \$5. Acme Mower Company, Wheeling, West Virginia, mower and drop-per, diploma. J. F. Barrow, Baltimore, automatic gate, diploma.

### Morticulture.

## The Fall Exhibition of the Pennsylvania Horticultural Society.

This show, which has come of late to be of national interest to horticulturists, was this year held in October, from the 22d to the 25th, quite a month later than the usual time. The Society occupies and owns a very large building in Philadelphia, known as Horticultural Hall, which has lately been remodeled—the changes in progress being the reason for the postponement beyond the usual date of the exhibition. The main hall is a very handsome room, beautifully and appropriately decorated, and the general arrangement and display of the productions entered were very satisfactory.

We were present at the show in companywith Mr. Brackenridge, of Baltimore Co., and give some notes made in the hall.

The large general collections of fruits from the newer Western States were not forwarded this year as is usually the case, though an entry of California Fruits by 1r. J. Strentzel, Alhambra Gardens, Martinez, Cal., attracted much attention. This gentleman exhibited Orange Quinces of extraordinary size, one or two specimens of which weighed 2½ lbs. each; his Baldwin apples, although large, were not so fair skinned as samples of the same fruit we have seen from the State of New York. The out-door Grapes of the same exhibitor did not look very inviting, having a greenish, unripe appearance, the berries being too much crowded together—altogether they were not what we expected to find as coming from California.

The display of foreign or hot house grapes was not remarkable. We thought those shown by Philip Reilly, gardener to Mrs. Merrick, were the finest, but the judges thought otherwise, and awarded the prize to Gebhard Huster, gardener to Mr. J. B. Heyl. We feel very confident that Mr. Fowler, gardener to Johns Hopkins, Esq., of this city, and who formerly competed for and took off many of the prizes on grapes at this show, Mr. Frazier, at W. T. Waiters', Esq., had each of them, this season, grapes far superior to any shown at this exhibition; and we regret very much that Baltimore was entirely unrepresented there, the more especially that our skillful gardeners and amateurs have no opportunity to display their productions at the show of any home society—and this too in a city of 300,000 population, while scarcely a town of 20,000 in the North but has its horticultural society!

Mesers. Ellwanger & Barry, of Rochester, N. Y., had the finest collection of Pears in the both in size and clean skinned specimens, tho varieties being presented. That of Mesers, Hovey & Co., of Boston, was large in number, though not so large as the above named, but the samples generally were small and not very tempting to the eye, nor were the specimen fruits of the large display of pears made by Mr. E. Satterthwaite, of Jenkinton, Pa., mach fuirer in appearance.

The entry of Apples from J. Perkins, Moorestown, N. J., 130 varieties, was a noble display, and received the prize, though the fine collections of Mr. Satterthwaite and Mr. Noble were also both exceedingly fine.

General collections of Fruits were presented from the Cambridge, Mass., and the Franklin Countý, Pa. Horticultural Societies, each of which received the silver medal of the Society, as also did the California offering.

The show in Vegetables was particularly rich and varied. The brothers Anthony and A. L. Felton had between them the largest and handsomest collection of vegetables we have ever seen at any show, every product of the garden from the earliest to the latest being produced, and almost in every case of finest appearance, their joint display nearly filling the whole of the large room devoted to the exhibition of vegetables. Too much praise can scarcely at awarded these successful gardeners.

From the lateness of the season, the show of plants in flower was limited, but Foliage or Ornamental Plants were offered in abundance, the principal contributors being Robert Buist. Mrs. M. W. Baldwin, H. Pratt McKean, and Miller & Hayes. Mixed with these were numerous specimens of rare hardy Evergreens, but the effect produced was anything but pleasing, owing to the stage on which they were placed (not arranged!) and which ran around the wall, being too high, so that the under side only of the exquisitely marked foliage plants could be seen. The general arrangement, in fact, of the floricultural de-partment of the exhibition was very unsatisfactory, and may be said to have been a failure, so far as convenience and good effect were concerned.

In Cut Flowers and Floral Designs, there was nothing of marked merit, all of the latter being stiff and inelegant, and of the former the collection of double and single Petunias shown by Mr. Dreer, a well known Philadelphia florist, being most worthy, we think, of notice.

The exhibition was very largely attended, as is usually the case. Although the society under whose direction the shows are held is a wealthy one, it doubtless, notwithstanding its liberal schedule of premiums, loses no money by them, and we see in this fact an additional argument why Baltimore with its intelligent and cultivated people should not much longer be without a Horticultural Society, with at least Spring and Fall shows.

#### Pruning Fruit Trees.

As the season is now approaching when farmers are supposed to have a little leisure time, we would like to offer a few remarks upon some small matters which, as a rule, are not too well attended to by our agricultural friends. We will take Pruning first, and here we will perhaps be guilty of saying something we have already said, or haply that some one else has said, there having been so much sense and nonsense bandled about on this subject that it may be impossible to say anything new upon it.

There is some slight difference in the method of pruning, according to the object desired. If we wish to obtain wood, or some special shape in the plant, then we may accomplish our desire with far less skill than if the production of fruit were our aim. It is, however, fair to presume that your readers cultivate trees mainly for the fruit, and to this object we shall confine our remarks.

It has been said, "for wood, prune in winter, for fruit, prune in summer;" and to a considerable extent this maxim is doubtless correct. The judicious pruning, or non-pruning of fruit trees, is a matter of more importance than is generally supposed by our farmer friends; but we would say here that it is far preferable to leave fruit trees to nature than to mutilate them in the way in which some

call pruning. The immediate object to be attained in pruning is to regulate the végetation of the plant; and we would impress the following fact upon the minds of your readers, who being unpractised in the matter, will perhaps feel inclined to doubt. If a tree is growing very vigorously, making strong shoots of barren wood, the effect of winter pruning would be to make it grow stronger in the Spring; and the harder it is pruned in winter the stronger will be the growth, that is, supposing the tree to be in a healthy, thriving condition. It will then be evident if we prune in winter, the better way is to prune strong, vigorous growing kinds, very lightly.

One object which we should have in view specially is to equalize the growth of the plant, so as to insure uniformity of vital force in every part of the tree. No trees are so unfruitful as those in which one part obtains an ascendancy over the rest, thereby so weakening the remainder of the head as to render it incapable of bearing fruit, or at the best but a few poor miserable specimens not worth the trouble of picking; while the more vigorous part of the tree is growing too strong to produce fruit buds. This is one of the evils which judicious pruning will rectify; another being the over crowding of the centre of the tree, thereby causing the tree to struggle upward too fast, bearing its finest fruit upon the uppermost branches. It will thus be evident that the main objects in pruning are the regulation of wood growth and the production of fruit. To accomplish this we must acquire some practical skill-must exercise judgment; and although we may convey some information, sometimes valuable instruction by the aid of the pen, yet nothing will compensate for the want of practice.

Where young trees are taken in hand properly very little pruning indeed suffices. If you wish to remove a branch entirely, take it off just where you see a swelling close to the body of the tree, or to a larger limb, as the case may be; the edge of the wound will then callous neatly over; and if the branch removed be small, the wound will heal over completely. When you shorten back a branch, cut close to a bud-of course not to injure itand see that the bud you leave for a terminal bud points outward; a little reflection will show the philosophy of this, as, if the bud points inward it will ultimately form a branch inward to the head of the tree to be removed at some future operation. We would have considered this little matter too small to notice here, had we not seen those who not only profess to know how to do it themselves, but also to teach others, cutting midway between two buds, or at any distance which the knife might strike, and sometimes leaving the terminal bud pointing inward, at others outward, just as the case might happen.

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In the case of young trees, it is preferable to look over them occasionally during the period of growth, and if a branch be outgrowing the rest of the head, it is well to

partly break through the branch a few inches from the point, leaving the piece hanging; it will very frequently prove a sufficient check. Rule out any misplaced shoots as they start into growth, by so doing you will benefit the trees and save both time and trouble. Sometimes old fruit trees show a disposition to throw out gross young shoots from older limbs; these should be ail trimmed off close.

We would recommend your readers to procure scions of any fruits for which they have the stocks, and commence grafting in the Spring; they will find this an easy manner of introducing good varieties of fruits into their orchards, as it often happens that a neighbor would give a scion of any excellent variety of fruit he chanced to possess. We have often seen a large number of stocks standing about on a farm which ought to be worked with useful varieties of fruit. Beside this, seed from choice fruits should be saved, and sown, and when grown large enough, grafted. Scions for grafting should be tied into bundles, labelied and packed away in some place where they will not dry nor freeze too much; sand is a good material to pack them in.

All young trees, small fruits, &c., should now be mulched with some material. See that young trees and trees fresh planted are not blown about.

In planting trees pack the soil tight about the roots, using a rammer for the purpose, being careful to keep sufficient soil over the roots to prevent bruising. Do not attempt to plant when the soil is too wet. N. F. F.

### Pear Culture-South Carolina Phosphates, &c.

Messrs. Sam'l. Sands & Son:

Gentlemen: I have read the numbers of your revived American Farmer with much pleasure, and have only one fault to find with your paper, which is, that it offers the finest breeds of stock at the lowest prices of any part of the United States that I am acquainted with, thereby exciting the sin of coveting. It is not as generally known as it ought to be, that animals of all of the improved breeds can be purchased through Baltimore from reliable breeders at much lower prices than anywhere else. At this time I will send you some short comments on articles in your September and October numbers, which have lately come to hand. And first as to "A Model Fruit Farm," you say that the Vicar of Winkfield seems peculiarly liable to the blight. The tree of this kind that I imported from Italy 36 or 40 years ago, is just dying, from the neglect caused by being obliged to abandon this plantation during the late war, and for two years after, and since then I have been unable either to cultivate or manure it, while I cannot recollect how many of the Duchesse, purchased years after, have long since disap-I have now the Bartletts that I first imported also from Italy, and healthy and only too fruitful, although they have not grown much. Is not a part of the superiority of Mr. Emory's pears due to his soil? My experience is, that pear trees thrive and bear well only in stiff clay soils, the more clay the bet-ter, and they do well also in red clay soils, but on sandy soils they are short-lived and unfruitful, and only a few varieties will do

anything at all.

Pears .- Mr. L. W. Gosnell commits a grievous error in allowing his pear trees, whether young or old, but more particularly when young, to bear or rather to ripen too much Severe thinning of fruit is absolutely necessary to get fine large fruit in favorable I should say that from # to # of the fruit ought to be thinned out, and that when young, in order that the tree may not be exhausted. Many persons think it a pity and waste to thin out fruit, but this is a great mistake; for when severely thinned even, the fruit allowed to remain, besides being so much larger and handsomer, as well as better, will weigh but little, if any, less than if all had been allowed to remain.

Bonne d'Ezee-This variety imported from France, proved an early, regular and abundant bearer, and the fruit showy, but watery, and with very little sweetness-so much so that I

never replaced my tree.

Out of about 125 to 150 varieties of pears that I have fruited, I thought the Duchess d' Orleans, or Beurre St. Nicholas the best after the Seckel, and the old Grey Butter pressed very close upon it, but proved a very short-

lived tree.

One of the very largest and finest pears, the Beurre Diel, seems to have almost entirely gone out of cultivation. One of its French synonyms is "Beurre Magnifique," and it truly is a magnificent variety, succeeding as well on the quince as the Duchesse, very nearly as large, and superior. It grows vigorously on the quince, and the fruit is larger and better when so grown than when on the pear stock. It comes into bearing early, bears regularly, and on my soil, only too abundantly; generally three pears in a cluster, but I never allowed more than one to remain, and sometimes not even one in each cluster. It is in season about the same time as the Duchesse.

Another delicious pear is the Winter Bon-chretien of the French. It is a late winter variety of the Beurre d'Aremberg character. being of the vinous, i. e., a mingling of the

sweet with the acid.

Another fine, late, large and productive pear is the old St. Germain. It also does best on the quince stock, is an early, regular and abundant bearer, and the fruit is large and inferior to few, whether new or old varieties

Neither of these varieties proved liable to blight with me, but the Winter Bonchretien sometimes cracked.

Another superior variety is the Doyenne Gris or Grey Doyenne. It is of the same size and shape and time of ripening as the White Doyenne, or Butter pear, but with me it proved almost equal for its many good qualities, to the Bartlett, to which the fruit was a little superior. It also grew well on the quince, came early into bearing, bore regularly and abundantly, and when ripe was of a rich golden color, and the fruit kept well when ripe.

In your October number, in your extracts from Dr. James B. Nichols' address on the "Food of Plants," he is made to say, when speaking about the Phosphoric Rock of this State, that it is estimated that 500 to 1,000 tons underlie each acre, while some deposits are 12 feet thick. Now I believe that 9 cubic feet weigh 3,000 pounds, and if so, and an acre is (210x210 feet) 44,100 feet, then each foot deep contains 7,350 tons, and 12 feet deep will of course contain 12 times as much, or 88,200 tons. I am in the centre of the Bull and Coosaw river deposits, but thus far the greatest depth of the stratum about here, as far as tried, is 5 feet, equal to about 30,000 tons when washed clean of the clay and sand in it.

To fill up this little remnant of paper, I send you enclosed the outline of a crab apple (Pyrus Coronaria) grown on a tree that I have here. This is taken from an extra fine fruit cut into two. They make a preserve almost equal to the quince, which does not succeed well here. The tree is low and spreading, and although neglected, bears from 2 to 3 barrels of apples yearly. I believe that it is a native of this State, at least it came to me from Chester

The outline of this apple measures 21 inches diameter. - Eds. A. F.1

I hope to be able to induce some negroes about me to gather sumac leaves for sale, as the plants are plentiful and grow wild. would, therefore, be very glad to see in one of your later numbers some account of the mill required for grinding the leaves, or the address of the owner, so that I may make any inquiries from him that I may need to have answered. As I cannot, here in the country, get the Agricultural Report for 1869, I would be glad to learn the address of Mr. Chase, of Alexandria, Va., in order that I may correspond with him about the mill that he has patented. I cannot hope to purchase myself, but I might induce some of the steam mill owners in Charleston, to add one to their other machines as soon as a reasonable assurance can be given of a sufficient supply of leaves to justify the outlay.

With sincere wishes for the prosperity and

extended usefulness of your excellently edited and very interesting journal, I remain, very sincerely, your old subscriber.

ROBERT CHISHOLM.

Pacific Landing, near Beaufort, S. C., Nov 12, 1872.

[A mill suitable for this purpose is made in this city by the Messrs. Denmead & Son, whose advertisement will be found in our advertising pages. It is the invention of Mr. Geo. B. Davids, one of the members of this old and respectable house. A suit has been pending for several years between Mr. D. and Mr. Carr, of

Montpeller, Bristol, England, as to the prior right of the patent, and the Examiner of Interferences in the U. S. Patent Office, has just decided the question in favor of our fellow-townsman, Mr. Davids. After receiving Mr. Chisholm's letter and other similar inquiries, we called on Mr. D., and was informed by him that the mill complete, capable of grinding a ton of Sumac every eight hours, is sold for \$1000; some of these mills are now used in Fredericksburg, Va., and elsewhere. An account of the decision of this case was published in the daily American of this city, on the 19th Nov., at the conclusion of which we find the following important annunciation:

"Some idea of the importance of this invention may be gained when it is stated that a mill of a size somewhat larger than those constructed for grinding bones, phosphates and the like, can be made to grind of the finest grades of flour a quantity per diem equal to that now ground by twenty-four pairs of the most approved mill-stones. It is believed to be the intention of the Messrs. Denmead to commence at once the manufacture of this description of mill, as well as smaller machines for grinding sugar, coffee and spices. The improvements of Mr. Davids are absolutely necessary in mills for all these purposes, and are creditable alike to the inventor and to the mechanical interests of our city."

In conclusion we would remark, that our articles on the culture of Sumac have attracted wide attention, and we have received letters making further inquiry upon the subject, especially in respect to the mill of Mr. Chase, of Alexandria, Va., noticed in the extract we made from the Agricultural Bureau report; to enquiries made of Mr. Chase, no replies were received by parties who have addressed us. We advise all persons who wish to obtain mills to place themselves in correspondence with the Messrs. Denmead, of Baltimore, in whom the utmost reliance may be placed—Eds. A. F.]

#### Grafting.

"N. F. F." denies having said that "the tongue graft is seldom used." If he will turn to April No. p. 139, and read the 6th and 7th lines, he will find something which will tend to make him think twice, &c., and to read his manuscript before he sends it to the editor. Perhaps he is not aware that tongue and whip grafting are one and the same. In regard to how many per cent. of Quercus, Ilex, Juglans, Acer, &c., will succeed, if tongue grafted, I cannot say, never having had "the bliss" of grafting them, but I have not the least doubt but that they would succeed admirably. I cannot see what Oaks, Hollies, Maples, &c.,

have to do with the subject. "N. F. F." started out to teach not the readers of the American Furmer of mature age, but "Young America" how to graft. Now, Mr. Downing says, that the tongue graft is the easiest and best for all common purposes. I am sure you can't get better authority. Your correspondent further says: "So far as the article on grafting is concerned, it is of the smallest importance." If "Young America" has but three or four stocks to graft on, and don't take the surest method of doing it, I fear he will be the loser, just because it is of no importance which method he uses.

P. Q. D.

Will P. Q. D. oblige us with his address? In the discussion on grafting and the management of fruit trees which just now gives interest to the Horticultural columns of the Farmer, one of the parties, N. F. F., is known to us as a skilled and successful horticulturist as well as a popular writer on subjects connected with his profession. His critic and opponent should make his name known to us, not necessarily, of course, for publication, but to comply with a general rule of the press that all contributors should be known to the editors.—Eds. A. F.

#### Fruit Trees and Planting.

Mesers. Editors: It was not my intention to create a controversy between "N. F. F. and myself, but seeing the mistake which he made in recommending "Amateur Orchardist" to plant certain trees in certain places, I thought it but right to correct the mistake. do not profess to be a man of many words, like your correspondent, and will therefore not take under consideration the beautiful ?) metaphorical anecdote, which he can take home to himself, with a greater degree of satisfaction, both as regards the anecdote and the manner in which he plants trees. still adhere to the opinion expressed in the October No., in regard to planting, and where to plant the dwarf pear, (i. e. the lightcst, deepest, and the richest soil,) and for standard pears, strong loam of moderate depth, on a dry subsoil. Soils that are over rich and deep force the trees into such a luxuriant growth, that its wood does not ripen well, and is liable to be killed by winter blight. If we had the trees spoken of by "N. F. F." which grows so beautifully in the lovely calley of the Thames, in Maryland, I fear that "N. F. F." would cite some other cases. Why do you fly away to foreign shores for your cases? England is not America, neither English climate American climate—come down to the point—draw your conclusions from home affidavits; don't run away from the country you live in; there are a thousand places you can see fruit trees growing the way you don't advance. Messrs. Editors, this is a matter which should concern every man that

plants trees. Will not "Plowman," "H. K." Mr. Robert S. Emory, (Kent county.) Mr. Brackenridge, or some one who knows something about the matter, throw some light on the subject?

P. Q. D.

#### Vegetable Garden-Work for Dec.

In sometimes happens during this month, in this latitude, that the season will admit of the preparation of the ground for spring operations, and as much work as can be done now will be saved in a busier season. much of the soil as can be exposed to the influence of the atmosphere the better, except in the case, perhaps, of light sands. whatever ploughing or spading can be done, there is little else needing attention in the garden, so far North as Maryland, it being supposed that the proper gathering and storing of root crops, &c., has been duly performed. Manure can be gotten together and the compost pile increased. This is always in order, and accumulations for it can be made in the coldest weather. Now, too, is a good time to prepare for future planting, the seeds saved from your own garden, and to make lists of those to be ordered from the seedsmen. These lists should go forward before the planting season begins, when the press of business often delays orders.

The long evenings of this and the ensuing months afford good opportunities for "reading up" and for making new plans and preparing for experiments in the coming year.

Furze.—We have received the following in reply to the inquiry of a correspondent in Nov. No.:

"Your correspondent on page 391 is referred to a communication of mine in the Southern Planter for June, 1st page, under the title 'diversified crops,' where he will find his query fully answered. The name is whin, furze or gorse, (ulex europæus.)

"I should be much gratified to hear of his success in the cultivation of this shrub—admirably adapted, as I seriously believe, to become a valuable crop in the impoverished South. It will yield such an ample quantity of manure so cheap, that it ought to be halled as a valuable acquisition to our forage crops. Do not let its length deter you from its publication, for I feel sure the more its history is studied, the more it will impress our people that their interest demands its introduction.

"Sincerely, yours, J. MARSHAL McCUE."

[The article alluded to by Mr. McCue, is from the able work of Mr. Henry Coleman, of Mass., entitled "European Agriculture," which is in the library of many of our agriculturists. It is exceedingly interesting, and will be copied into the American Farmer at an early day, with Mr. McCue's comments, which we find in the Planter.—Eds. A. F.]

### The florist.

Floriculture, &c.-Dec., 1872.

By W. D. BRACKENBIDGE, Florist and Nurseryman, Govanstown, Baltimore county, Md.

It is gratifying to know that a growing tendency prevails among the people of the United States towards the love of floricultural pursuits; and especially have we noticed in the rural districts, a marked advance in what we would call the decorative, or "Gardenesque," as the celebrated Mr. Loudon termed it; this means making every object which surrounds a dwelling, whether this object may belong to the useful or ornamental appendages of the homestead, all to have a tendency in contributing to make that home elegant and at-We see dwellings which cost thoutractive. sands of dollars in their erection, placed out on a bare field, round which the sun makes his diurnal swing, yet not one tree or vine put down to break one ray from off the walls and windows of that desolalate and solitary abode. In a civilized land such things ought not to be. But as a counterpart to this, we have been pleased to see that small conservatories, or plant-houses, have been appended to many of our recently erected suburban residences, either in the shape of a bow-window, or as an offset, in the way of a wing to the dwelling; and the management and care of the collection is, we find, very often the office of one of the female members of the family. the economy in keeping a small collection of plants may be carried farther, by having all the heat necessary, to come from the sittingroom, by simply opening the glass door between them during the night; and if enough of heat cannot be got in this way, then a pipe can be led from the furnace which heats the whole dwelling. Now, if such plant structures are judiciously managed, there will result much pleasure and saving to its owner; for what is more gratifying and agreeable than, on the eve of setting out for a party, or about to entertain our friends, than to be able to step into our own conservatory and cull some choice Camellias, Roses, Carnations, Violets, Heliotropes, &c., with which to regale those friends. But if lack of means prevents indulging in such tastes on a large scale, then secure a Wardian Case, which can be placed in a moderately heated room, opposite a window fronting the south; in this can be grown a vast assemblage of delicate foliaged plants—such as Ferns, Lycopods, Pilea Muscosa, Oxalis, in sorts, Fly-Catchers, Creeping Silverleaved Euonymus, Crocus and Tulips of the Van Thol kinds; these two last, with a few Hyacinths and Snow Drops, will produce a fine effect towards spring; but attention must be paid to cover the whole surface with green moss, which grows well in a confined humid atmosphere.

We repeat again, that great damage is done to plants by keeping up a high temperature during the early part of winter; this in the ordinary green-house should range between 45 and 55 degrees, and in the plant stove, not above 65; increasing the heat as spring approaches, and during the same period noted above; water should be given, both at root and overhead, very sparingly; but in order to keep the atmosphere humid, shallow basins of water should be placed on the pipes or flues. This, together with sprinkling the pathways daily, will prevent any aridity of the air.

Every good cultivator will examine the collection under his charge at least twice every week, in order, first, to collect all decayed leaves, and then to see that nothing is suffering from rot, want of room, or a better position. All these, it may be said, are small matters, but they are just such as are too often neglected, to the detriment and destruction of

costly plants.

Sweet Alyssum, Mignonette, and Pansy seed may yet be sown, and all young plants by cuttings, should be potted off so soon as they have formed roots, after which they ought to be kept in a warm situation for one or two weeks.

A very important item in plant culture is, to have stored away in bins, under cover, a good supply of various kinds of earths, sand and manure, so that it may always be in a condition ready for use.

Dablias, Tigridia, Tuberose and Gladiolus roots, should be well cleaned and dried in the shade, before placing them away in their winter quarters; this should be dry and cool, but proof against all frosts.

W. D. B.

WINTER FLORAL ORNAMENTS.—Nothing very new to some, but to those who don't know, a few hints may remind the lovers of Flora that they can have an object in which to gladden the eye and make cheerful the days of cold and storms. Bring in your rustic flower stand; place under it an old waiter or shallow zinc pan, to hold a few inches of soil, in which plant young ferns and cover with moss-cover so as to conceal the soil and pan. In the stand place pots of plants that will suit the dry air of a room; raise the centre pot very high; an inverted seven inch pot will do; half fill up the spaces between the pots with soil, cover with moss to hide the pot rims. The moss will keep the plants pot rims. A Begonia Rex or Poinsettia, will moist. make a showy centre; add Geranium Leonidas, Heliotrope, Silver Balm, Begonias, and Fuchias in bloom. Replace with blooming plants those out of bloom.

In the window it is not easy to have flowers in great abundance during the depth of winter, partly from want of direct light and partly because the atmosphere is much too dry. The reason florists are enabled to obtain flowers so bountifully is they grow but few kinds, and those of sorts with distinct colors, as scarlet, pink, white and flowers that have their petals comparatively persistent—that is, not drop to pieces as soon as they are picked.

### The Foultry Yard.

Care of Fancy Fowls.

The very best possible arrangement will be, a dry house with a roomy shed at the side floored with clean yellow sand, and with a moderate grass-run in front well shaded with trees. The grass should, however, be kept short by mowing, or the plumage of feathered breeds especially will become draggled. The hole by which the fowls enter their house must be of good size, and all the doors should be fastened wide open when open at all, to avoid any injury to the tails. For the same reason, the perch must be fixed so far from the wall that the tail of the cock can in no circumstances touch it: and if it rest at the ends on ledges fixed to the wall of the house, a bit of lath should be tacked slantwise upwards from a few inches off the end, in houses inhabited by light-colored fowls. The object, of course, is to prevent the birds—the cocks especially-from roosting with their wings against the wall, and thus getting them soiled. Examination should be made every night to see that each bird is properly accommodated, and none squatting in corners on the dirty ground. The fowls, again, should never be rashly driven about or frightened, which often causes the loss of tail or other feathers that can ill be spared. Whenever they are wanted, for show or otherwise, let them be quietly taken from their roost at night, when they will make no effort at escape or resistance. None of these give trouble—they only require thoughtful remembrance; but they make a wonderful difference in the condition of birds so cared for over that of others differently treated .- Wright's Illustrated Book of Poultry.

How to Pluck Poultry.-That farmer whose poultry is not troubled with the gapes, that has not been visited with the chicken cholera, knows what it is to prepare forty or fifty fowls for market since the practice of scalding has been vetoed by the buyers, I have known persons on market day to go out and kill a dozen or fifteen at a time and bring them into a room where there would be half a dozen women and boys pulling a few feathers at a time between the thumb and forefinger to prevent tearing them. Now, for the benefit of such I give our plan: Hang the fowl by the feet by a small cord; then, with a small knife give one cut across the upper jaw, opposite the corners of the mouth; after the blood has stopped running a stream, place the point of the knife in the groove in the upper part of the mouth, run the blade up into the back part of the head, which will cause a quivering and twitching of the muscles; now is your time, for every feathers yield as if by magic, and there is no danger of tearing the most tender chick; before he attempts to flap, you can have him as bare as the day he came out of the egg. The wise ones may discuss the reasons—I only know the effects.—Cor. N. Y. Tribune.

### The Lireside.

#### Never Give Up.

Never give up! it is wiser and better Always to hope than once to despair: Throw off the load of doubt's cankering fetter, And break the dark spell of tyrannical care. And oresk the wark spen of tyrannical care.

Never give up! or the burthen may sink you,

Providence kindly has mingled the cup.

And in all the trials or troubles bethink you.

The watchword of life should be—Never give up.

Never give up! there are chances and changes
Helping the hopeful a hundred to one,
And mid the chaos, high wisdom arranges
Ever success—if you'll only hope on.
Never give up! for the wiscest is boldest,
Knowing that Providence mingles the cup,
And of all maxims the best as the oldest
Is the true watchword of—Never give up.

Never give up! though the grape shot may rattle,
And the full thunder cloud over you burst,
Stand like a rock and the storm or the battle
Little can harm you, though doing their worst.
Never give up! if adversity presses,
Providence wheely has ming ed the cup,
And the best counsel in all your distresses
Is the stout watchword of—Never give up.

NATURE.-" Is stormy life preferred to this serene?" To the majority it is; to the few who prefer nature, life is serene. For a life serene?" in the country, "there is continual spring and harvest here." The superior attractions nature offers to those who love her, never satiate; her voice is peace to the troubled, joy to the "Dost thou feel the solemn whispering influence of the scene ?" For the student, also for the careless, nature has unlimited sources of interest. Her secrets, subtle or sublime, excite our curiosity and command our admiration. The phenomena of the ter-restial, also of the celestial world, arise far above the reach of impotent man; how feeble human effort to imitate the grand exhibitions In hours of retirement what can of nature. be more delightful than to contemplate the splendid objects which the firmament displays!

The study of nature elevates the mind above grovelling and sordid pursuits; it also tends to humble the pride of man, and makes him realize that our little affairs, our follies, our pretentions, are but passing myths. Seneca says: "Is it to this little spot that the great designs and vast desires of men are con-

LET US HAVE LIGHT.—The American Build-Do not arrange your house so as to er savs: violate God's first commandment. Give it many windows, and then, O housewife, keep your blinds open during the day and your curtains drawn aside. If you let the sun in freely it may "fade the carpets," but if you do not it will be sure to cause ill health to the mothers and the children. The sun is a good physician. He has never had the due credit for his curative qualities—for the bright eyes and row cheeks that comes from his health. and rosy cheeks that comes from his healing bath. A dark room is an enemy of good alth, good temper and good morals.

#### DOMESTIC RECIPES.

MINCEMEAT .- Two pounds of raisins, three pounds of dry currants, one and a half pounds good lean beef, three pounds of beef suet, two pounds of moist sugar, two ounces of citron, two ounces of candied lemon peel, two ounces of candied orange peel, one grated nutmeg, one quart sweet apple, the grated rind of two lemons, the juice of one, and half a pint of best French brandy. Stone the raisins, and cut them once or twice across; wash, dry and pick the currants; boil the beef till tender, mince it very fine; skin, string and chop the suct: slice the citron and candied peel; pare, core, and mince the apples, and when all the ingredients are ready stir them with a wooden paddle in a wooden vessel, till thoroughly mixed; add the brandy, and pack all closely in jars, covered air-tight till used.

MINCE PIES .- Butter some patty-pans well, line them evenly with thin puff paste, then fill the pans with mince-meat; moisten the edges of the paste, and close carefully; trim off the paste; make a small opening in the centre of the top crust with the point of a knife. Bake them half an hour in a well heated, but not fierce oven. It is well to place a piece of white paper over the pies while baking, to prevent them taking too much color.

STUFFING FOR ROAST PORK .- One middlesized Spanish onion, boiled for ten minutes and drained, chopped very finely with a tablespoonful of sage; mix these with three tablespoonfuls of fine bread-crumbs, a teaspoonful of salt, and half a teaspoonful each of pepper and mustard. Bind with the yolk of an egg.

COOKING RAISINS.—It is well to cook raisins before putting them into pies, cakes, or puddings. Soaking them is not sufficient. Steaming them by pouring a small quantity of boiling water amongst them in a tightly closing dish, and allowing them plenty of time to cook before opening, is a good plan. When raisins are rightly cooked before using, they are plumper and more palatable, and can be eaten without injury by most dyspeptics.

APPLE JAM .- Pare and quarter the apples, which should be ripe and of the best eating sort; put them into a pan with just water enough to cover them, and boil until they can be reduced to a mash. Then, for each pound of the pared apples, a pound of sifted sugar is added, sprinkling over the boiling mixture. Boil and stir it well until reduced to a jam. Then put into pots. The above is the most simple way of making it; but to have it of the best possible clearness, make a thick syrup with three pounds of sugar to each pint of water, and clarify it with an egg. Then add one pint of this syrup for every three pounds of apples, and boil the jam to a proper thick-

PUMPKIN PIES.—Pare the pumpkin, then grate it, add sugar and ginger to taste, and milk enough to make it of the proper consistency; then line your pie-tins with crust, put in your pumpkin and bake in the ordinary way.

#### Preparation and Value of Fish Manure.

Thomas Wade, of Prince Edward's Island, writes to the Canada Farmer as follows:

"In a recent number of your journal, Mr. Makinson, of Newfoundland, requests information relative to keeping fish manure from premature decay. A few years since, being largely engaged in fishing and fish curing operations in Great Britain, my attention was also turned to the above subject. Having tried many experiments, I found the most simple method was to salt the refuse fish and offal, then boil at leisure, then pulp and put into suitable canvas, press out all moisture with a powerful screw; the oil was saved, the cakes were sun-dried and ground into any degree of fineness required. It kept well.

A neighbor of mine reduced his offal with dilute sulphuric acid, and added ground kelp

to give it body.

Another incorporated the offal with superphosphate of lime, the quantity of water in the fish serving to dilute the acid, it being dried up by the natural heat of the process

I'have thus endeavored to reply to Mr. Makinson's inquiry about fish manure as briefly as possible. There can be no doubt of the value of the article. The supply is practically unlimited, and the demand for a good material would be enormous. The samples manufactured by me were valued at £8 sterling per ton; that at Concarneau at £7 10s. per ton, but their oil sold higher than ours, and so

about averaged the prices.

The progress of migratory shoals, such as mackerel, herring, pilchards, etc., is as regular, deliberate, and unconcerned after centuries of fishing, and, I may add, as numerous as ever. Nor do I fear that the increasing demands upon the shoals of codfish on the banks of Newfoundland, have either alarmed or lessened the quantity of fish. The fact is, so enormously prolific are all species of fish, of the edible kinds especially, that the idea of

exhaustion is absurd.

In 1854, the catch of cod at Newfoundland was about 1,500,000 tons, and is said to be increasing greatly, which, if we reckon the fish to weigh upon the average eight pounds each, will give the number of 392,000,000 of codfish. Now, as the roe of one full grown fish contains one million eggs, it would require only three hundred and ninety-two fish to supply the whole take, supposing all the eggs were to

fructify. I have known 20s. sterling per ton paid for fish offal and inedible fish for conversion into manure, and it paid a fair profit, but in these seas and coasts, swarming as they are with fish of all sorts and crustacea, it could be obtained at a much lower cost. The facilities obtained at a much lower cost. The facilities offered here are most inviting, capital and requisite knowledge being all that are needed to develope one of the most profitable resources of industry within the scope of my knowledge.

Is there any good reason why the countless millions of fish which swarm along our coasts. cannot be utilized-some species to be salted and packed for food, and others reduced, near the spot where they are caught, to oil and manure? Is there not an opening here for an extensive and profitable business?

#### Grass Culture in Tennessee.

Dr. Lee, in a letter to the Plantation, written from Lenoirs' Station, thus speaks of a family in Tennessee long known to us for their spirited efforts in the extension of the agricultural improvement of their State. In former times, we had many evidences of this; and as soon as we announced our intention to resume the publication of the old Farmer, we received from them, with others, the cheering hailing sign of help in our undertaking, in the form of a goodly list of subscribers to the present volume. Dr. Lee says of these gen-

"The Lenoirs have a magnificent farm of some four thousand acres on both sides of the Tennessee river, which, I learn, is to be devoted to grass-culture and dairy purposes. The owners of this estate are distinguished alike for their integrity, enterprise, intelligence and success as business men. The policy of crowding as many stems and leaves of grass as possible on every square foot of this limestone land, and then transforming all this herbage into cheese and butter for the market, is wise and far-seeing. While pure butter is gold, when viewed as a commercial article, it is nothing in the world but common air when considered as an agricultural product. Hence, one can easily enrich his land while raising grass and selling butter."

The Agricultural Report for November gives the cotton prospects substantially the same as the October report. The total crop is estimated at 3,450,000 commercial bales, of 468 lbs. to the bale.

The indicated product of fibre per acre as returned from each county makes the following average for each State: North Carolina, 173 lbs.; South Carolina, 182; Georgia, 180; Florida, 125; Alabama, 170; Mississippi, 200; Louisiana, 225; Texas, 220; Arkansas, 170; Tennessee, 190.

The area in cotton as calculated from the resurns of 1872 is as follows: North Carolina, 450,629 bales; South Carolina, 570,652; Georgia, 1,311,331; Florida, 158,099; Alabama, 1,387,972; Mississippi, 1,537,618; Louisiana, 940,218; Texas, 914,269; Arkansas, 692,512; Tennessee, 518,605. In calculating the indicated product the average bale is estimated at 468 lbs

The New York cotton market for the week ending November 23, showed a decided advance, the highest # cent., the lowest ‡a# cent.

#### BALTIMORE MARKETS, Nev. 22.

Breadstuffs-Flour.—Howard St. Super, \$5.25a6.25; do. common to fair Extra, \$5a7.25; do. good to choice do., \$7.50a7.75; do. Family, \$8.50a10; Ohio and Indiana Super, \$5.25a6.25; do. common to fair Extra, \$6.50a7.25; do. good to choice do., \$7.50a7.75; do. Family, \$8a9.75; city Mills Super, \$6a6.25; do. standard Extra \$7.50a8; do. Rio brands, do., \$9a0.50; City Fancy brands, \$11.50a.12. Fine Flour, \$4a5. Rye Flour, \$4a5.25. Corn Meal, \$3.40a3.69. \$3.40a3.60.

Wheat.—Market firm; not very active; Southern white, fair to good, 185a195 cts; do. prime to choice, 200 a205 cts; Western red 160a165 cts; do. white 195 cts; Southern red, good to prime, 180a190 cts.; good to prime

Corn.—Market firm and fairly active; Southern old white, 60a65 cts.; new do. 56a63 cts.; old yellow, 60a62 cts.; new do. 56a60 cts.; Hominy Corn 65a72 cts.; Western white 61a62 cts.; do mixed, new, 60a61 cts. Outs—Southern, 42a45 cts; mixed Western, 42a44 cts.

Cotton .- Ordinary 18% cts ; low middling 18% cts ;

Middling 19 cts.

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New Orleans 80a85 cts. Syrups.—Calvert 55a60 cts.; Maryland 48a55 cts.; CantonSugar-House 18 cts. in hhds., and 21 cts. bbls.

Provisions -Bulk Shoulders, 5% c; Bib Sides, 9 c; clear rib Sides, 9½ c; Bacon, Shoulders, 7 c; Rib Sides, 9½ c; Bacon, Shoulders, 7 c; Rib Sides, 9½c; clear Rib, do. 10½all c.; Hams, 16al7 c. Mess Pork, \$16 per bbl. Lard, 9 c. Rice.—Carolina, 8½a9 c. for choice.

Salt.—Ground Alum, \$1.70a1.80. Fine, \$2.70a2.80. Turks Island, 35a40 cts. per bushel.

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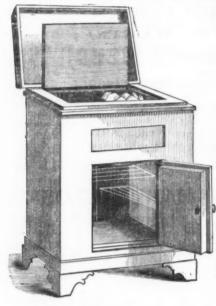
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With the recommencement of our connection with our old journals, we have determined also to renew our **AGENCY** for the supply of everything required by Farmers and Planters residing at a distance from Baltimore, who may not have Commission Merchants or Factors in this city.

Our long experience, and, we flatter ourselves, our judgment and discretion, in this business, will enable us to render good service to those who may wish to obtain our aid.

We will purchase and have carefully shipped, by whatever mode of transportation may be designated:

FERTILIZERS of every description sold in this market—and there is, probably, no other city in the Union which offers better facilities for this purpose. We will buy, and deliver from the Peruvian Agent's Warehouses, whenever the order is sufficiently large to warrant it,

#### PERUVIAN GUANO,

Of the Chincha Island and Guanape brands; the various PHOSPHATIC GUANOS imported into this port; BONE DUST from the best manufacturers of this vicinity, or the cheaper kinds from a distance, as may be ordered by the purchaser;

# Land Plaster, Oil Vitriol, and all Chemicals Required In the manufacture of HOME MANURES or SUPERPHOSPHATES, from the most reliable factories.

FRUIT and ORNAMENTAL TREES, SHRUBBERY, Field, Garden and Flower SEEDS.

All kinds of **AGRICULTURAL IMPLEMENTS** and **MACHINERY** at manufacturers' prices. Likewise,

### Cattle, Horses, Sheep, Pigs, Poultry, &c.,

Of the improved breeds. In this vicinity, in some particular kinds of stock, a better selection can be made than elsewhere, and special attention will be given to buying and forwarding such animals as may be ordered.

#### LAND SALES.

As a great demand is expected ere long to be made for Landed Estates in the Middle and Southern States, we have opened a correspondence with men of established reputation engaged in the Real Estate Agency, in this State, Virginia and the Carolinas, and copies of pamphlets containing a list of the Farms, location, price, and other particulars, will be kept for the inspection of those wishing to purchase; and we will, with great pleasure, render every facility in furthering the objects of both buyer and seller. To those wishing to advertise in our journal, we will give our aid without any fee further than the cost of the advertisement.

We will at all times be happy to receive, at the sign of the "Golden Plow," our old farmer friends, on visiting the city, whether or not they may have any special business, and will be prepared, with cheerfulness, to give them any aid or advice in our power, without any consideration therefor except the consciousness of being able to render them a service.

#### OUR TERMS.

As we expect to carry on this portion of our business strictly as an AGENCY, we must in all cases require the CASH (or its equivalent) in hand to make purchases. The small commissions we may require—and these will, in most cases, be paid by manufacturers, breeders or dealers—will not justify our transacting the business on any other terms. Address

#### SAML. SANDS & SON.

No. 9 North st., near Baltimore st., Baltimore, Md., sign of the golden plow.

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# THOS. NORRIS & SON,

MANUFACTURERS AND DEALERS IN

# Agricultural Implements

Field and Garden Seeds, Fertilizers, &c.

Would call special attention to the following first-class Machines, &c.:

Westlinghouse Threshers and Cleaners.

Aultman & Taylor's Threshers and Cleaners.

Lever and Railway Horse Powers-most approved.

Van Wickle Wheat Fan. Price \$37.

American Cider Mill and Press—the best—\$40.

Young America Cider Mill and Press—Family, use—\$25.

#### Bickford & Huffman Grain Drills,

Plows, Harrows, Cultivators, Straw Cutters, Corn Shellers, and all kinds of Farming Tools. Fresh Field and Garden Seeds, Pure Ground Bone and other Fertilizers.

> THOMAS NORRIS & SON, 141 Pratt st., Baltimore, Md.

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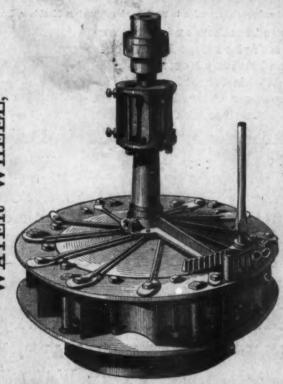
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Machinery for White Lead Works and Oil Mills.

SEND FOR CIRCULARS. TH

HAGERSTOWN, MD., December 11th, 1871.

Messra. Pools & Hust:

Gentlemen: During my experience in Water Wheels, I have used ten different make of wheels; the last I put in were the James Leffel American Double Turbine Wheels. I am perfectly satisfied with them. They are giving me about double the power I ever had before, and less repairs than any of the others.

(Signed,)

J. W. STONEBRAKER.

